The Expert's Assistant.

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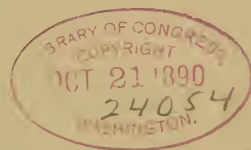
EXPERT'S ASSISTANT.

A COMPENDIUM

GIVING RULES FOR THE CERTAIN DETECTION OF ALL KINDS OF ERRORS IN
POSTING, ETC.—HOW TO DETERMINE WHAT EACH SIDE OF THE TRIAL
BALANCE SHOULD FOOT INDEPENDENT OF THE LEDGER, BOTH BY
TOTALS AND DIFFERENCES.—THE MOST COMPLETE AND
EXHAUSTIVE TREATISE ON TRANSPOSITIONS AND
MISPLACEMENTS EVER PUBLISHED, SHOWING
THE EXACT AMOUNT OF THE ERROR.

THE LATEST AND BEST RULES FOR AVERAGING ACCOUNTS, INTEREST,
FOREIGN EXCHANGE, RAPID FOOTING AND EXTENSIONS.
—HOW STOCK COMPANIES ARE FORMED, AND HOW
TO OPEN AND KEEP THEIR BOOKS.—BAL-
ANCE SHEETS, BUSINESS
LAW, ETC.

BEN S. KNOWLTON.

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CONTENTS.

THE EXPERT'S ASSISTANT.

As the title of this work indicates, it is not intended as a treatise on book-keeping, but as an assistant to those already actively engaged in the profession, and for advanced students who may desire to avail themselves of its help. Therefore, but little instruction will be attempted as to the ordinary routine work, and only such examples and forms given as may serve to illustrate the principles, etc., involved.

The idea of the author has been to present, in as concise form as possible, tables, rules and forms that will lighten and expedite the work of the accountant, thereby enabling him not only to do his work with more ease to himself, but, what is of far greater importance, give better satisfaction to his employer.

The tables and forms presented it is not claimed are all new or original, although some of them have never before been published, but are such as are required almost daily, and if published are scattered through many works, not to be easily obtained when most needed. Their value and use will be appreciated on examination.

The rules given are the result of many years' practical experience in all classes of accounts, and are believed to be the best and shortest for the purposes indicated.

The rules on INVERSIONS AND MISPLACEMENTS are believed to be the most complete and exhaustive ever published, and are to a great extent entirely original, especially as regards misplacements, which shows what has never before been attempted, viz., the *exact amount in full that has been misplaced; not an approximation or a portion, but every figure composing the sum*, thus enabling the accountant to locate and find the error at once, as it gives him the only *possible amount* that could make it.

The table of possible inversions or transpositions shows at a glance how many and what inversions may be made with any given difference. Although it is probably used by experts, they have to stop and figure it out every time they have occasion to use one. It is now published for reference for the first time.

The rules for *determining not only the dropped figure in any sum, but all the figures of that sum* to the left of the one dropped, are entirely new and original, and will be found of great value in detecting that class of errors.

The method of determining what the footing of the trial balance should be when taken by the Ledger footings, although not generally known, has been in use by experts for years. The method where the trial balance is taken by differences is claimed to be new and original.

By these methods one can determine exactly what the footing of his trial balance should be, independent of the Ledger, and thus ascertain the errors, if any, on each side, and knowing just what to look for, will, in connection with the other methods given, usually enable the accountant to locate and detect the errors at once, thus obviating the necessity of the tedious process of checking each item on both sides until found, as is generally practiced, thereby effecting a great saving in time and annoyance.

JOURNALIZING.

In the Journal, in its simplest form, only the Ledger headings, or names of the various accounts appear, and in order that the various amounts making up those accounts should appear in their proper places, it is necessary that they should be properly journalized, giving each account its proper debit and credit.

The terms debit and credit are generally understood, but it often happens that in complex entries the book-keeper is puzzled as to the proper way in which to make the Journal entry from the statement on his blotter so as to get the proper debits and credits.

The following simple rule will enable him to do so without any trouble, viz.:

Who, or whatever costs is debtor. Who, or whatever produces is creditor.

By applying this rule to each item, any entry, no matter how complex, may be readily arranged under its proper Ledger heading, and in its proper place. As an instance, suppose you found on your blotter the following history, or statement of a transaction:

March 3, 1890.

Bought of John Smith,
    Lot 5, Blk. 11, Brown's Addition to St.
      Paul, for......... ....
	3,500	00		

Also received from him our note, dated January 1st, @ 60 days for..................	1,000	00		
Interest on same @ 7%.........................	12	12		
Also account against S. Jones...............	50	00	4,562	12
In payment of which we have sold him 250 bbls. Flour @ 7.00....................... .	1,750	00		
And given him R. Taylor's note @ 4 mos. from January 1st for.......…..........	650	00		
Interest accrued on same 2 mos. @ 8%..	8	67		
And our note @ 1 year @ 6% for...........	1,500	00	3,908	67
Cash for bal. as per Cash Book.....653.45				

In making the Journal entries of the foregoing, the first step is to determine what is debit and what is credit by the rule. On analyzing it, we find that:

Real Estate is debit, as it cost.....................................	3,500	00
Bills Payable is debit, as it cost........	1,000	00
Interest is debit, as it cost..	12	12
S. Jones is debit, as he cost...	50	00
John Smith is credit, as he produced..	4,562	12
Merchandise is credit, as it produced........…................................	1,750	00
Bills Receivable is credit, as it produced.......................................	650	00
Interest is credit, as it produced ....…......................	8	67
Bills Payable is credit, as it produced.........	1,500	00
John Smith is debit, as he cost.....................................	3,908	67

As the Cash Book shows a debit for the balance to John Smith, it does not appear on the Journal.

The above may be simplified or condensed so as to read on the Journal as follows:

March 3, 1890.

Sundries Dr. to Sundries,				
Real Estate....................................	3,500	oo		
Bills Payable.................................	1,000	oo		
Interest..	12	12		
S. Jones......................................	50	oo		
To Merchandise................			1,750	oo
To Bills Receivable...			650	oo
To Interest			8	67
To Bills Payable...............			1,500	oo
To John Smith.................			653	45

BOOKS OF ACCOUNT.

The books in general use consist of—

The Day Book, or Blotter, in which is recorded all transactions as they occur (except cash), and should give, in as brief terms as possible, a full history of each transaction. The entries may be made by anyone.

The Cash Book, in which is entered all cash transactions, receipts and disbursements. Entries, as a rule, in the Cash Book should only be made by the person responsible for the cash. A very good method is to keep a petty Cash Book, on which all cash transactions are entered as they occur, and the same balanced daily, and a general Cash Book, kept by the book-keeper only, to which all entries in the petty Cash Book, in a consolidated form, should be transferred (such as Merchandise, Sales, Expense, etc.), and if checks on the bank are treated as cash, the bank should be credited, and the individual and other accounts debited, as they would not appear on the petty Cash Book. The general Cash Book need not be balanced more than once a month and the total receipts and disbursements posted but once a month. By using a three-column Cash Book the Merchandise, Cash Sales and Expense account need not be posted but once a month, as will be shown in the example given.

The Journal, which is kept by the book-keeper, shows each account arranged under its proper Ledger heading, ready for posting, and requires no further explanation than that already given, as the history of each transaction appears on the Day Book, or Blotter, and it is only a useless repetition to make them on the Journal, as the original entry is the only one good in law.

The Ledger contains all accounts pertaining to the business, under their proper headings, as transferred from the Cash Book and Journal.

There are a great many other books in use to suit the convenience of the business, or ideas of the proprietors, such as Merchandise Sales Books, on which appear all sales made for cash or credit (in some cases credit sales only), and postings made from it direct, without appearing on the Journal. In the first instance, cash sales must be transferred to the Cash Book daily, and credit sales extended into a separate column from which the Merchandise credit can be posted daily or monthly, as preferred. Invoice Books are also used, in which all credit purchases of merchandise are entered. These can also be posted direct, without going on the Journal. But they are practically a part of the Day Book, or Blotter, and only serve to scatter the record of the business through several books, instead of all being on one, and forming a continuous record of the business from day to day. In many large houses these and other auxiliary books are a necessity, as it would be almost impossible to make a record of all their transactions on a single book. But, as a general rule, the fewer the number of books, and the simpler they are, the better, as the more complicated they are the greater the liability to error, as every transfer from one book to another increases it and makes it more difficult to discover.

A trial balance should be taken off every month, not only for the purpose of proving the correctness of the books, or ascertaining and correcting any errors that may have been made, but for the information and guidance of the proprietors, who, by an intelligent study of the same, can see just how their business is going from month to month, and regulate it accordingly; watch not only individual credits, to see that they are not improperly extended or increased, but their total line of credit sales, to see that they are not increased beyond their ability to carry with safety. Many houses, apparently doing a large and prosperous business, have been swamped by neglecting to study their accounts; found payments falling due that must be met, and nothing to meet them with except a large line of unavailable accounts on their books, that might have been avoided if they had studied their books as the mariner does his charts, neglect in either case being almost surely fatal.

At least once a year a balance sheet should be made, inventories taken, dead or worthless accounts closed out, and a new start taken with clean sheets. Many persons object to closing doubtful accounts into Profit and Loss at the time of making the balance sheet, under the impression that it finally disposes of them, and that they have no further claim on them. This is a mistaken notion, and only makes the profits appear larger than they really are and increases the assets by worthless accounts; and, in consequence, the balance sheet does not show the exact state of the business, as it should do. If, as is often the case, anything should be realized from such accounts, it is very easy to restore them by crediting Profit and Loss with the amount.

EXPERT BOOK-KEEPING.

Expert accountants (and all who follow the profession should be experts) should, in addition to mastering all the details of the business, familiarize themselves with the principles of commercial law and customs, as "commercial custom, in the absence of direct law upon the subject, is law;" the laws governing the formation and conduct of corporations in their states; the relations of principals and agents; the collection of accounts, and those governing promissory notes; be able to draw up any ordinary agreement in a proper and legal form without the assistance of a lawyer; in fact, should be conversant with all kinds of business forms and usages, and thus enhance the value of their services to their employer and raise the standard of their profession.

In book-keeping, as in any other business or profession, "*Knowledge is power*," and the more general information you have the higher you will rank.

TRIAL BALANCES.

The taking of a trial balance each month is necessary to prove the correctness of the Ledger, and to detect and correct the errors, if any. This involves a great deal of labor, especially when there are a large number of accounts on the Ledger, and when errors have been made. Under the old methods, the only means of detecting them was by the slow and tedious process of going over and

checking each entry until the errors were found; and as there may be, and usually are, errors on both the debit and credit sides, the difference affords no clue to the actual ones on either side.

A method by which the footings of each side of the trial balance can be determined independent of the Ledger cannot but prove a great saving in time and labor, as it enables the accountant to determine the *exact amount of errors on each side*, and thus, knowing definitely just what to look for on either side, be enabled to locate them much more readily. This, in connection with the rules for finding errors of *misplacements and transpositions*, which in cases of misplacements give the full amount of the sum misplaced, and in transpositions showing all possible transpositions, render the discovery of errors a comparatively easy matter, and avoids, in most cases, the necessity of checking through the month's business.

Trial balances are taken in two ways: first, by the total footings of each side of every open account on the Ledger; and, second, by differences — that is, the balance of each account. Each method has its advantages and advocates, which it is needless to discuss here, leaving each one to form and enjoy his own opinion.

One very great advantage claimed for trial balances by totals over that by differences has been that while the footings of the trial balance could be determined by that method independent of the Ledger, "*it could not be done when taken by differences.*" This is a mistake, *as it can be done* (as will be fully shown) *as readily and certainly when taken by differences as by totals*, with this difference, that while the same figures are used for both sides when taken by totals to show the footing of the trial balance, when taken by differences the result is obtained by entirely different figures for each side, and independent of each other, thus being a check each on the other.

TRIAL BALANCES BY TOTALS.

When a trial balance is taken by totals the footings of the previous trial balance will be increased by all amounts posted to the Ledger from all sources, *i. e.*, Cash Book, Journal, etc., and decreased by the amount of all accounts which have been closed during the month, and by the amount closed out, where balances have been brought down.

TRIAL BALANCES BY DIFFERENCES.

To ascertain what the footing of each side of the trial balance should be when taken by differences, independent of the Ledger:

The balance of Merchandise account being on the debit side, the *debit side* will be increased by all purchases of merchandise, either for cash or credit, during the month; by all cash payments on accounts showing a debit balance, such as Expense, Interest, Freight, etc.; by all credit or cash purchases of property other than merchandise, unless paid for in merchandise; by the increase in the cash balance (not the balance) during the month over the previous one; by the increase in the balance in bank during the month.

If the balance of Merchandise account being on the debit side the previous month, should appear on the credit side for the current month, then the debit side would be increased by such balance in addition to the purchases.

The balance of Merchandise account being on the *credit side for the previous and current months*, the debit side will be increased by the credit sales instead of purchases, not taking the cash sales or purchases into account. The debit balance will be decreased by all receipts on accounts and bills receivable, either in cash or merchandise, that show a debit balance, by credit sales of merchandise to persons having a credit balance, and by receipts (either in cash, account or note) on shipments on joint account. It will also be decreased by the decrease of the balance of cash on hand during the month, and by the decrease in the balance in bank during the month, and the cash sales of merchandise for the month if the balance of Merchandise is on the debit side. The difference between the increase and decrease, added to or subtracted from the total of the previous month's trial balance, will give the amount that the debit side of the trial balance should foot.

The credit side, the balance of Merchandise being on the debit side, will be increased by all investments in the business during the current month; by all credit purchases of merchandise or other property, either on account, note or mortgage, during the month; by the net receipts during the month from interest, commission, profit and loss (if the balances of the accounts are on the credit side); and by the balance to the credit of shipments on joint account for the month.

If the balance of Merchandise account being on the *debit side the previous month, should appear on the credit side* for the current month, the credit side would be increased by such balance in addition to the credit purchases. The cash sales and purchases are not taken into account when the balance is on the debit side.

The balance of Merchandise account for the previous and current months being on the credit side, it will be increased by the credit and cash sales.

The credit side will be decreased by all payments made, either in cash or merchandise, during the month on accounts showing a credit balance; by the net amount paid on Interest and similar accounts if they show a credit balance; and if the balance of Merchandise account be on the credit side for the previous month, by the amount of the cash purchases for the month.

The difference added to or subtracted from the total of the previous month's trial balance will give the footing of the credit side.

In cases where one kind of property is exchanged for another (except merchandise), where there is a profit or loss on the property exchanged, the debit side will be increased by the net profit or decreased by the loss.

In cases of merchandise companies that are not closed out, the debit side will be increased by the total cost, taking no account of any sales except for cash. If there should be any, they would decrease the debit side. In cases of shipments on joint account to others, where the property shipped has not entered into the Merchandise account, and the shipment has not been closed, the debit side will be increased by the amount charged against it, including the profit, or less the loss, if account sales have been rendered.

The credit side will be increased by the profit on exchange of property, other than merchandise, and decreased by the loss. It will be increased by the cost of merchandise companies, less the cash, if any charged against them, and by the cost of shipments on joint account, where the shipment has not entered into the Merchandise account, and the shipment has not been closed.

All sums drawn out of the business by the proprietors will decrease the credit balance, the same as payments to parties having a credit balance.

The following transactions are given in order to illustrate the methods fully, the Ledger accounts being transferred from one month to another, simply for convenience in reference and to avoid confusion in the trial balances:

Where the trial balances are taken by totals, it will be found convenient to use a small blank book or paper, which can be placed in the back of the Ledger, and secured by a rubber band, in which to enter the amount of accounts as they are balanced, or the amount closed out when balances are brought down.

Where the trial balance is taken by differences, a similar arrangement will be found convenient in which to enter the amounts received each day on debit accounts, and such other items as go to increase or decrease the debit side. The credit and cash purchases and sales of merchandise need not be entered, as they can be readily ascertained from the Journal and Cash Book, or taken from the Ledger at the close of the month. Payments and other items that go to increase or decrease the credit side should also be kept in a similar manner. In this way the book-keeper will find that it will take but a few minutes to determine what the correct footing of each side of his trial balance should be, and the amount of the errors, if any, on each side, and thus know exactly what to look for, saving much time and more annoyance, and besides having the satisfaction of knowing that his trial balance is *absolutely correct*, both sides having been proved independent of the other, and by entirely different figures. Under the old system, while the trial balance might show the books as being correct, an error in posting to one side might be offset by an error in footing on the other, and, having no other proof than the mere fact of having a balance, would never be discovered.

It has not been thought necessary to make any errors in the transactions in order to show the manner of detecting them, as that is fully shown in the articles on "Transpositions," "Misplacements," and "Dropped Figures," while those of omission would appear from the differences indicated by the proof of the footings.

The examples have been made very full and varied, in order to cover as many different kinds of accounts as possible, and show the application of the method to the various conditions. It is believed

that they will be readily understood in connection with the explanations appended.

The foregoing method is based on the theory that everything that goes to increase the assets of the business, in the way of property and representative accounts, increases the debit side of the trial balance, Expense and similar representative accounts being considered an asset until closed into Profit and Loss (personal accounts are not considered, as they are simply an exchange of one asset for another), and that all receipts on personal and other accounts that diminish the assets, real or apparent, decrease the debit side.

In the same manner, the credit side represents the liabilities, and everything that goes to increase them adds to the credit side, and payments made on accounts, etc., that go to diminish them, decreases the credit side.

In the case where the balance of the Merchandise account is on the debit side, the assets and liabilities are each increased by the credit purchases : the assets, because we have that much more merchandise on hand ; the liabilities, because we have become indebted to that extent. The cash purchases increase the debit side, because we have diminished one asset (as shown by the cash balance) to increase another. The cash sales decrease the debit side for a similar reason, the cash on hand or in bank being increased, while the balance, or amount of merchandise, on hand has been diminished. Where the balance of Merchandise account appears on the credit side, it becomes an apparent liability, and the cash and credit sales increase that liability, and, in consequence, increase the credit side. The debit side is increased by the credit sales, as it represents an increase in the amount due on personal accounts, and therefore an asset. The cash purchases decrease the credit side when the balance of merchandise is on the credit side, because it diminishes the apparent liability. The decrease in assets is accounted for by the decrease in cash balance.

MERCANTILE BOOKS:

DAY BOOK, CASH BOOK, JOURNAL, LEDGER.

TRIAL BALANCES.

PROOFS BY TOTALS AND DIFFERENCES.

January 1st, 1890.

Bot. of B. K. Marshall,						
Store on East Third street for..................	13,500	00				
Fixtures, etc., contained in same..............	1,500	00	15,000	00		
On which we have assumed mortgage for	10,000	00				
Interest due on same to date..................	150	00				
Gave him note @ 1 year with interest @ 7%..	4,850	00	15,000	00		
Bot. of Perry, Nichols & Co., @ 4 mos.,						
10 casks O. P. Brandy, 550 gals......@ 2.50	1,375	00				
50 bbls. O. C. Whisky, 2,050 gals....@ 1.75	3,587	50				
Cartage.........	3	00	4,965	50		
Bot. of Eureka Packing Co., for note @ 60 days,						
3,500 cases Canned Goods, asstd., @ 4.00	14,000	00				
January 3d.						
Bot. of C. A. Pillsbury & Co., @ 30 days,						
500 bbls. XXX Flour.....................@ 6.15	3,075	00				
Bot. of Armour Packing Co., @ 30 days,						
20,000 lbs. Bacon Sides.................@ 7¼	1,450	00				
100 bbls. Mess Pork....................@ 12 50	1,250	00	2,700	00		
January 4th.						
Bot. of P. Lorillard & Co., for note @ 6 mos.,						
Cigars and Tobacco, as per invoice........	2,750	00				
Bot. of New York Refining Co., @ 3 mos.,						
Sugar and Syrups, as per invoice...........	5,187	50				
January 5th.						
Sold A. H. Jones & Co., Denver, Colo., @ 3 mos.,						
2 casks O. P. Brandy, 115 gals.......@ 3.20	352	00				
10 bbls. O. C. Whisky, 410 gals.....@ 2.15	881	50				
Cartage.........		50	1,234	00		
January 7th.						
Bot. of Jas. Kirk & Co., @ 6 mos.,						
Soap, etc., as per invoice.....................	650	00				
Bot. of N. K. Fairbanks & Co., @ 30 days,						
10,000 lbs. Lard.................................@ 9	900	00				
Sold H. Wilson & Co., Fargo, Dak., @ 60 days,						
25 bbls. XXX Flour......................@ 7.25	181	25				
1,000 lbs. Bacon Sides.................@ 9½	95	00				
5 bbls. Mess Pork.......................@ 15.00	75	00				
1 bbl. O. C. Whisky, 41 gals.........@ 2.50	102	50				
Cartage.........		50	454	25		

January 8th.

Bot. of Oriental Tea Co., @ 4 mos.,				
Coffee, Tea and Spices, as per invoice....	5,750	00		
Sold W. H. Johnson & Co., Brainerd, Minn.,				
25 cases Canned Peaches.............@ 6.50	162	50		
25 cases Canned Apricots............ @ 7.00	175	00		
25 cases Canned Plums................@ 6.75	168	75		
25 cases Canned Salmon..............@ 7.00	175	00		
100 boxes Soap, 6,000 lbs.................@ 4	240	00		
50 lbs. Climax Plug.......................@ 40	20	00		
2 m. Key West Cigars................@ 50.00	100	00		
500 lbs. Bacon Sides......................@ 10	50	00		
Cartage.........		50	991	75

January 9th.

Sold B. Simon & Co., for their note @ 60				
days,				
8 casks O. P. Brandy, 440 gals......@ 3.10	1,364	00		
39 bbls. O. C. Whisky, 1,599 gals..@ 2.10	3,357	90		
5 m. Key West Cigars................@ 48.00	240	00		
10 m. G. S. Cigars.....................@ 30.00	300	00	5,261	90
Sold Fisher & Kellogg, City,				
100 lbs. Rio Coffee.........................@ 25	25	00		
100 lbs. Y. H. Tea...........................@ 50	50	00	75	00

January 10th.

Sold E. H. Taylor & Co., Stillwater, Minn.,				
10 bbls. Sugar, 2,850 lbs ....@ 10	285	00		
2 bbls. Syrup, 90 gallons.................@ 55	49	50		
100 lbs. Rio Coffee..........................@ 25	25	00		
100 lbs. Java Coffee................... ....@ 28	28	00		
100 lbs. Y. H. Tea.................. ......@ 50	50	00		
100 lbs. G. P. Tea...........................@ 55	55	00		
Cartage.........		50	493	00

January 11th.

Bot. of McVeigh & Co., @ 4 mos.,				
Mdse., as per invoice.............................	3,785	00		
Sold H. P. Upham & Co., City,				
50 bbls. Mess Pork............. ......@ 15.00	750	00		
10,000 lbs. Bacon Sides....................@ 9	900	00		
20 bbls. A Sugar, 5,560 lbs............@ 9½	528	20		
1,000 cases Canned Goods, asstd..@ 6.00	6,000	00		
250 bbls. XXX Flour...................@ 7.25	1,812	50	9,990	70

Cr.

Received from them on above,				
50 Shares First Natl. Bank Stock,@ 125.00	6,250	00		

<center>January 12th.</center>

Received of A. Fink & Co., Chicago (Mdse. Co. A), to be sold on joint acct., each one-half,				
100 bbls. Vinegar @ 7.00........ 700 00				
50 bbls. Pickles @ 15.00. .... 750.00				
—————				
1,450.00				
Our one-half of above invoice.................	725	00		
<center>January 14th.</center>				
Bot. of Jas. Wilson & Co.,				
25 bbls. Tallow, 6,250 lbs..................@ 4	250	00		
Sold Jas. Kirk & Co.,				
25 bbls. Tallow, 6,250 lbs...............@ 4½	281	25		
<center>January 15th.</center>				
Bot. of D. Henning & Co., City,				
1,000 bush. Potatoes.....................@ 60	600	00		
250 bbls. Apples..........................@ 2.25	562	50	1,162	50
Shipped above to A. Davidson & Co., Memphis, Tenn., on joint account, each one-half,				
A. Davidson & Co.'s one-half.................	581	25		
<center>January 16th.</center>				
Sold P. H. Kelly & Co., from Mdse. Co. A,				
50 bbls. Vinegar...........................@ 8.00	400	00		
<center>January 17th.</center>				
Sold Donaldson & Co., St. Cloud, Minn.,				
5 bbls. Sugar, 1,470 lbs...............@ 10½	154	35		
1,200 lbs. Bacon...........................@ 9½	114	00		
1 bbl. Syrup, 44 gals.......................@ 56	24	64		
60 lbs. Y. H. Tea.............................@ 50	30	00		
<center>Cartage.........</center>		50	323	49
<center>January 18th.</center>				
Sold Beaupre, Keogh & Co., from Mdse. Co. A,				
50 bbls. Vinegar...........................@ 8.00	400	00		
10 bbls. Pickles..........................@ 17.50	175	00	575	00
<center>January 19th.</center>				
Sold Allen, Moon & Co., from Mdse. Co. A,				
40 bbls. Pickles..........................@ 17.50	700	00		

January 21st.

Closed Mdse. Co. A, and rendered A. Fink & Co., account sales,				
A. Fink & Co., credit for their one-half of shipment...............................	725	00		
A. Fink & Co., credit for their one-half of net gain.....	59	07		
Storage and Advertising..........................	15	00		
Commission on 1,675.00 @ 2½%............	41	87		
Our one-half net gain............................	59	06	900	00

January 22d.

Bot. of Sprague, Warner & Co., Chicago, @ 3 mos.,				
Mdse., as per invoice............................	3,750	00		

January 23d.

Sold H. Wilson & Co., Fargo, @ 60 days.				
5 bbls. Sugar, 1.450 lbs................@ 10½	152	25		
2 bbls. Syrup, 87 gals.................. ....@ 56	43	72		
100 lbs. Tea....................................@ 55	55	00		
Cartage.........		50	251	47

January 24th.

Sold Fisher & Kellogg, City,				
2 bbls. Sugar, 550 lbs ....@ 10½	57	75		
1 bbl. Syrup, 44 gals.......................@ 56	24	64	82	39

January 25th.

Sold E. H. Taylor & Co., Stillwater,				
100 lbs. Piper Heidsick Plug......... .@ 42	42	00		
2 m. G. M. Cigars.....................@ 67.50	135	00		
2 m. P. B. Cigars............... ......@ 35.00	70	00	247	00

January 26th.

Sold H. Wilson & Co., Fargo,				
1,000 lbs. Bacon ....@ 9½	95	00		
2 bbls. Mess Pork......................@ 17.00	34	00		
Cartage.........		25	129	25

January 28th.

Received account sales from A. Davidson & Co. of shipment of Apples and Potatoes,				
Our net proceeds.................................	697	50		

January 29th.

Sold W. H. Johnson & Co., Brainerd,				
200 lbs. Rio Coffee.........................@ 23	46	00		
150 lbs. Tea............. ....@ 55	82	50		
50 boxes Soap, 3,000 lbs.................@ 4	120	00		
2 m. G. M. Cigars ....@67.50	135	00		
Cartage.........		50	384	00

January 30th.

Received of H. P. Upham & Co., their note @ 60 days, in settlement of account.... ...		3,740	70			
Accepted A. Fink & Co.'s draft, 10 days' sight, to balance account..		1,509	07			

January 31st.

Sold Donaldson & Co., St. Cloud,						
50 cases Canned Peaches.............@ 6.50		325	00			
25 cases Canned Apricots............@ 7.00		175	00			
25 cases Canned Plums................@ 6.75		168	75	668	75
Sold Durant & Co., Fergus Falls, for note @ 60 days,						
100 cases Canned Goods, asstd.....@ 6.50		650	00			
5 bbls. Sugar, 1,460 lbs................@ 10½		153	30			
300 lbs. Coffee.................................@ 24		72	00			
Cartage.........			50	875	80

2

1890.		DR. CASH.	MDSE.		SUNDRIES.		BALANCES.	
Jan.	1	To B. K. Marshall, Investment.......................			25,000	00		
		" B.S. Knowlton, Investment.			25,000	00		
		" First Ntl. Bk., 225.00, 50.00, 75.00, 100.00...			450	00		
	2	" First Natl. Bank.............			375	00		
		" Mdse., per Sales Book.............................	162	50				
	4	" Mdse., per Sales Book.............................	257	25				
	5	" First Natl. Bank.................			127	00		
	7	" Mdse., per Sales Book.............................	347	00				
	8	" First Natl. Bank........			4,568	26		
		" Int. and Dis., P. N. & Co...........................			397	24		
		" Mdse., per Sales Book.............................	565	50				
	9	" Bills Rec., B. S. & Co............			5,261	90		
		" Mdse., per Sales Book.............................	287	35				
	10	" Mdse., per Sales Book.............................	145	60				
	11	" First Natl. Bank, 62.50, 215.00....................			277	50		
		" Mdse., per Sales Book........	375	80				
	12	" Mdse., per Sales Book.............................	428	40				
	14	" E. H. Taylor & Co................................			250	00		
		" First Natl. Bank..........................			3,482	20		
		" Int. and Dis., McV. & Co...........................			302	80		
		" Mdse., per Sales Book.............................	248	25				
	15	" First Natl. Bank.....			85	00		
		" Mdse., per Sales Book.............................	135	00				
	16	" Fisher & Kellogg.............................			75	00		
		" First Natl. Bank....			175	00		
		" Mdse., per Sales Book.	275	00				
	17	" First Natl. Bank..................................			1,162	50		
		" Mdse., per Sales Book.............................	487	50				
	18	" Int. and Dis., J. K. & Co...........			32	50		
		" First Natl. Bank..................................			368	75		
		" Mdse., per Sales Book.............................	148	90				
	19	" Mdse., per Sales Book.............................	243	00				
	21	" W. H. Johnson & Co......			300	00		
		" Mdse., per Sales Book.......	178	25				
	22	" Mdse., per Sales Book.............................	290	35				
	23	" Beaupre, Keogh & Co..............................			575	00		
	24	" Mdse., per Sales Book.............................	540	00				
	25	" A. Davidson & Co..........			1,278	75		
		" Mdse., per Sales Book.............................	188	40				
	26	" Allen, Moon & Co..........			700	00		
	28	" W. H. Johnson & Co..............................			450	00		
		" Mdse., per Sales Book.............................	296	50				
	29	" Mdse., per Sales Book.............................	347	45				
	30	" Int and Dis., O. T. Co.............................			287	50		
		" First Natl. Bank....			5,462	50		
		" Mdse., per Sales Book.............................	235	00				
	31	" Mdse., per Sales Book.............................	185	60				
		To Mdse. total for month.............................	6,368	60				
		To Sundries total for month.........................			76,444	40		
		Grand total...					82,813	00
							82,813	00

1890.		CR. CASH.	EXPENSES.		SUNDRIES.		BALANCES.	
Jan.	2	By First Natl. Bank, Deposit.........................			50,000	00		
		" Freight, 225.00, 50.00..........................			275	00		
		" Expense, Stationery...............................	75	00				
	3	" Expense, Cartage 3.00, Stamps 2.50..........	5	50				
		" Expense, Ins. on 50,000............................	375	00				
	4	" Freight..			52	50		
	5	" Freight...................................			127	00		
		" Expense, Cartage 5 00, Sundries .75.........	5	75				
	7	" First Natl Bank, Deposit.........................			750	00		
	8	" Perry, Nichols & Co..			4,965	50		
	9	" Freight..			165	00		
		" First Natl. Bank, Deposit...........			5,188	24		
		" Int. and Dis., B. S. & Co.........................			73	66		
		" Expense, Cartage 3.00, Sundries 3.85........	6	85				
	10	" First Natl. Bank, Deposit			500	00		
	11	" Freight..			62	50		
		" Mdse., 100 bbls. Apples......			215	00		
	12	" Mdse. Co. A., Freight and Cartage...........			50	00		
		" Expense, Sundries.	11	25				
	14	" First Natl. Bank, Deposit...........			1,050	00		
		" McVeigh & Co.......................................			3,785	00		
	15	" Expense, Pay Roll...................................	212	50				
		" Expense, Coal...........	85	00				
	16	" Int. and Dis., Interest on Mortgage..........			175	00		
		" Expense, Sundries............................... ...	4	95				
		" First Natl. Bank, Deposit.........................			750	00		
	17	" D. Henning & Co....................................			1,162	50		
		" Expense, Cartage, etc.............................	4	75				
		" Jas. Kirk & Co......................................			368	75		
		" Mdse., Sundries..			57	80		
		" Expense, Sundries...........	12	80				
	19	" First Natl. Bank, Deposit.................... ...			500	00		
	21	" Expense, Sundries...................	5	60				
	22	" Freight.............			45	60		
	23	" First Natl. Bank, Deposit....................... .			1,375	00		
	24	" Expense, Sundries.................................	6	75				
	25	" Int. and Dis., A. D. & Co.........................			5	81		
		" First Natl. Bank, Deposit.........................			1,778	75		
		" Expense, Sundries.................................	5	40				
	26	" Storage and Advt......			25	00		
	28	" First Natl. Bank, Deposit			1,500	00		
	29	" Expense, Sundries.........	15	85				
	30	" Oriental Tea Co.....................................			5,750	00		
	31	" First Natl. Bank, Deposit			750	00		
		" Expense, Sundries.................................	11	40				
		" Expense, Pay Roll...................................	212	50				
		By Expense total for month.	1,056	85				
		By Sundries total for month.........................			81,503	61		
		Grand total					82,560	46
		By Balance on hand.............					252	54
							82,813	00

Mdse.	Sundries.	January 1st, 1890.	Sundries.	Mdse.
	13,500 00	Sundries Dr. to Sundries, Real Estate.		
	1,500 00	Furniture and Fixtures,		
		Mortgage Payable.......	10,000 00	
		Bills Payable.............	4,850 00	
		Interest and Discount.	150 00	
18,965 50		Mdse. Dr. to Sundries,		
		Perry, Nichols & Co..	4,965 50	
		Bills Payable..............	14,000 00	
5,775 00	·	3d. Mdse. Dr. to Sundries		
		C. A. Pillsbury & Co..	3,075 00	
		Armour Packing Co...	2,700 00	
7,937 50		4th. Mdse. Dr. to Sundries,		
		Bills Payable............	2,750 00	
		N. Y. Refining Co....	5,187 50	
	1,234 00	5th. A. H. Jones & Co., Dr. to Mdse.........		1,234 00
1,550 00		7th. Mdse. Dr. to Sundries,		
		Jas. Kirk & Co............	650 00	
		N. K. Fairbanks & Co.	900 00	
	454 25	H. Wilson & Co., Dr. to Mdse..........		454 25
5,750 00		8th. Mdse. Dr. to Oriental Tea Co.............	5,750 00	
	991 75	W. H. Johnson & Co., Dr. to Mdse....		991 75
		9th. Sundries Dr. to Mdse.,		5,829 90
	5,261 90	Bills Receivable.		
	75 00	Fisher & Kellogg.		
	493 00	E. H. Taylor & Co.		
3,785 00		11th. Mdse. Dr. to McVeigh & Co..............	3,785 00	
		Sundries Dr. to Mdse.,		9,990 70
	6,250 00	First Nat. Bank Stock		
	3,740 70	H. P. Upham & Co.		
	725 00	12th. Mdse. Co. A Dr. to A. Fink & Co.....	725 00	
250 00		14th. Mdse. Dr. to Jas. Wilson & Co...........	250 00	
	281 25	Jas. Kirk & Co., Dr. to Mdse........		281 25
1,162 50		15th. Mdse. Dr. to D. Henning & Co...........	1,162 50	
		Sundries Dr. to Mdse.,		1,162 50
	581 25	Shipment to Memphis.		
	581 25	A. Davidson & Co.		
45,175 50	35,669 35	....................*Carried Forward*................	60,900 50	19,944 35

Mdse.		Sundries.		January 15th, 1890.	Sundries.		Mdse.	
45,175	50	35,669	35	...............Brought Forward...............	60,900	50	19,944	35
		400	00	P. H. Kelly & Co., Dr. to Mdse. Co. A......	400	00		
				17th.				
		323	49	Donaldson & Co., Dr. to Mdse...........			323	49
				18th.				
		575	00	Beaupre, Keogh & Co., Dr. to Mdse. Co. A...	575	00		
				19th.				
		700	00	Allen, Moon & Co., Dr. to Mdse. Co. A...	700	00		
				21st.				

		900	00	Mdse. Co. A. Dr. to Sundries,
				    A. Fink & Co................
				    Storage and Advertising.
				    Commission ....
				    Profit and Loss..............
					784
					15
					41
					59
						07
						00
						87
						06		

				22d.				
3,750	00			Mdse. Dr. to Sprague, Warner & Co..	3,750	00		
				23d.				
		251	47	H. Wilson & Co., Dr. to Mdse...........			251	47
				24th.				
		82	39	Fisher & Kellogg, Dr. to Mdse			82	.39
				25th.				
		247	00	E. H. Taylor & Co., Dr. to Mdse...........			247	00
				26th.				
		129	25	H. Wilson & Co., Dr. to Mdse...........			129	25
				28th.				
		697	50	A. Davidson & Co., Dr. to Shipment to Memphis...	697	50		
				29th.				
		384	00	W. H. Johnson & Co., Dr. to Mdse......			384	00
				30th.				
		3,740	70	Bills Receivable, Dr. to H. P. Upham & Co...	3,740	70		
		1,509	07	A. Fink & Co., Dr. to Bills Payable......	1,509	07		
				31st.				
		668 875	75 80	Sundries Dr. to Mdse., Donaldson & Co. Bills Receivable.			1,544	55
48,925	50			Mdse. Dr. for total purchases for mo. Mdse. Cr. for total sales for mo.......			22,906	50
48,925	50	47,153	77		73,172	77	22,906	50

B. K. Marshall.

						1890 Jan.	1	By Cash Investment...	1	25,000	00

B. S. Knowlton.

						Jan.	1	By Cash Investment...	1	25,000	00

First National Bank.

1890 Jan.	2	To Cash Deposit.........	50,000	00	Jan.	1	By Cash Checks..........		450	00
	7	" Cash Deposit.........	750	00		2	" Cash Checks..........		375	00
	9	" Cash Deposit.........	5,188	24		5	" Cash Checks..........		127	00
	10	" Cash Deposit	500	00		8	" Cash Checks..........		4,568	26
	14	" Cash Deposit.........	1,050	00		11	" Cash Checks..........		277	50
	16	" Cash Deposit.........	750	00		14	" Cash Checks..........		3,482	20
	19	" Cash Deposit.........	500	00		15	" Cash Checks..........		85	00
	23	" Cash Deposit.........	1,375	00		16	" Cash Checks..........		175	00
	25	" Cash Deposit.........	1,778	75		17	" Cash Checks..........		1,162	50
	28	" Cash Deposit.........	1,500	00		18	" Cash Checks..........		368	75
	31	" Cash Deposit.........	750	00		30	" Cash Checks..........		5,462	50

Merchandise.

Jan.	11	To Cash.....................	215	00	Jan.	31	By Cash Sales for mo...	6,368	60
	18	" Cash.....................	57	80		31	" Sun.Cr. Sales for mo	22,906	50
	31	" Sundries for month	48,925	50					

Cash.

Jan.	31	To Receipts for month	82,813	00	Jan.	31	By Disb'ments for mo.	82,560	46

Freight.

Jan.	2	To Cash.....................	275	00					
	4	" Cash.....................	52	50					
	5	" Cash.....................	127	00					
	9	" Cash.....................	165	00					
	11	" Cash..............	62	50					
	22	" Cash.....................	45	60					

Interest and Discount.

1890					1890				
Jan.	9	To Cash.....................	73	66	Jan.	1	By Real Estate............	150	00
	16	" Cash.....................	175	00		8	" Cash P. N. & Co....	397	24
	25	" Cash.....................	5	81		14	" Cash McV. & Co....	302	80
						18	" Cash J. K. & Co.....	32	50
						30	" Cash O. T. & Co....	287	50

Real Estate.

Jan.	1	To Sundries................	13,500	00					

Furniture and Fixtures.

Jan.	1	To Sundries................	1,500	00					

Mortgage Payable.

					Jan.	1	By Real Estate............	10,000	00

Bills Payable.

					Jan.	1	By Sundries................	4,850	00
						1	" Mdse................	14,000	00
						4	" Mdse....................	2,750	00
						30	" A. Fink & Co.........	1,509	07

Bills Receivable.

Jan.	9	To Mdse. B. S. & Co...	5,261	90	Jan.	9	By Cash......................	5,261	90
	30	" H. P. Upham & Co.	3,740	70					
	31	" Mdse......................	875	80					

Perry, Nichols & Co., New York.

1890					1890				
Jan.	8	To Cash......................	4,965	50	Jan.	1	By Mdse. 4 mos...........	4,965	50

C. A. Pillsbury & Co., Minneapolis.

					Jan.	3	By Mdse. 30 days........	3,075	00

Armour Packing Co., Chicago.

					Jan.	3	By Mdse. 30 days.........	2,700	00

New York Refining Co., New York.

					Jan.	4	By Mdse. 3 mos...........	5,187	50

A. H. Jones & Co., Denver, Col.

Jan.	8	To Mdse. 3 mos...........	1,234	00					

Jas. Kirk & Co., Chicago.

Jan.	14	To Mdse......................	281	25	Jan.	7	By Mdse......................	650	00
	18	" Cash.............	368	75					
			650	00				650	00

N. K. Fairbanks & Co., Chicago.

					Jan.	7	By Mdse. 30 days.........	900	00

H. Wilson & Co., Fargo, Dak.

1890										
Jan.	7	To Mdse. 60 days........	454	25						
	23	" Mdse. 60 days........	251	47						
	26	" Mdse.........	129	25						

Oriental Tea Co., San Francisco.

Jan.	30	To Cash.....................	5,750	00	Jan.	8	By Mdse. 4 mos...........	5,750	00

W. H. Johnson & Co., Brainerd.

Jan.	8	To Mdse......................	991	75	Jan.	21	By Cash......................	300	00
	29	" Mdse......................	384	00		28	" Cash................	450	00

Fisher & Kellogg, City.

Jan.	9	To Mdse...............	75	00	Jan.	16	By Cash................	75	00
	24	" Mdse......................	82	39					

E. H. Taylor & Co., Stillwater.

Jan.	10	To Mdse......................	493	00	Jan.	14	By Cash......................	250	00
	25	" Mdse......................	247	00					

McVeigh & Co., Chicago.

Jan.	14	To Cash.....................	3,785	00	Jan	11	By Mdse. 4 mos...........	3,785	00

First National Bank Stock.

Jan.	11	To Mdse......................	6,250	00					

H. P. Upham & Co., City.

1890 Jan.	11	To Mdse...................		3,740	70	1890 Jan.	30	By Bills Rec...............		3,740	70

Merchandise Co. A.

Jan.	12	To A. Fink & Co.........		725	00	Jan.	16	By P. H. Kelly & Co....		400	00
	12	" Cash, Freight........		50	00		18	" Beaupre, K. & Co...		575	00
	21	" Sundries....		900	00		19	" Allen, Moon & Co..		700	00
				1,675	00					1,675	00

A. Fink & Co., Chicago.

Jan.	30	To Bills Payable..........		1,509	07	Jan.	12	By Mdse. Co. A...........		725	00
				1,509	07		21	" Mdse. Co. A...........		784	07
										1,509	07

James Wilson & Co., City.

						Jan.	14	By Mdse....................		250	00

D. Henning & Co., City.

Jan.	17	To Cash....................		1,162	50	Jan.	15	By Mdse.....		1,162	50

Shipment to Memphis.

Jan.	15	To Mdse....................		581	25	Jan.	28	By A. Davidson & Co..		697	50

A. Davidson & Co., Memphis, Tenn.

Jan.	15	To Mdse....................		581	25	Jan.	28	By Cash...................		1,278	75
		" Ship't. to Memphis		697	50						
				1,278	75					1,278	75

P. H. Kelly & Co., City.

1890 Jan.	15	To Mdse. Co. A............	400	00						

Donaldson & Co., St. Cloud.

| Jan. | 17 | To Mdse..................... | 323 | 49 | | | | | | |
| | 31 | " Mdse..................... | 668 | 75 | | | | | | |

Beaupre, Keogh & Co., City.

Jan.	18	To Mdse. Co. A............	575	00	1890 Jan.	23	By Cash......................	575	00

Allen, Moon & Co., City.

Jan.	19	To Mdse. Co. A............	700	00	Jan.	26	By Cash.............	700	00

Storage and Advertising.

Jan.	26	To Cash......................	25	00	Jan.	21	By Mdse. Co. A............	15	00

Commission.

					Jan.	21	By Mdse. Co. A............	41	87

Profit and Loss.

					Jan.	21	By Mdse. Co. A............	59	06

Sprague, Warner & Co., Chicago.

						1890 Jan.	22	By Mdse. 3 mos...........		3,750	00

Expense.

1890 Jan.	31	To Cash, exp. for mo...		1,056	85						

TRIAL BALANCE B. K. MARSHALL & CO., JAN. 31, 1890.

NAMES.	L. F.	Totals. Dr.		Cr.		DIFFERENCES.			
B. K. Marshall........................				25,000	00			25,000	00
B. S. Knowlton........................				25,000	00			25,000	00
First National Bank......................		64,141	99	16,533	71	47,608	28		
Merchandise................................		49,198	30	29,275	10	19,923	20		
Cash..		82,813	00	82,560	46	252	54		
Freight.....................................		727	60			727	60		
Interest and Discount....................		254	47	1,170	04			915	57
Real Estate.................................		13,500	00			13,500	00		
Furniture and Fixtures..................		1,500	00			1,500	00		
Mortgage Payable........................				10,000	00			10,000	00
Bills Payable...............................				23,109	07			23,109	07
Bills Receivable...........................		9,878	40	5,261	90	4,616	50		
C. A. Pillsbury & Co........				3,075	00			3,075	00
Armour Packing Co.......................				2,700	00			2,700	00
New York Refining Co....................				5,187	50			5,187	50
A. H. Jones & Co..........................		1,234	00			1,234	00		
N. K. Fairbanks & Co....................				900	00			900	00
H. Wilson & Co............................		834	97			834	97		
W. H. Johnson & Co......................		1,375	75	750	00	625	75		
Fisher & Kellogg..........................		157	39	75	00	82	39		
E. H. Taylor & Co.........................		740	00	250	00	490	00		
First National Bank Stock..............		6,250	00			6,250	00		
Jas. Wilson & Co..........................				250	00			250	00
Shipment to Memphis....................		581	25	697	50			116	25
P. H. Kelly & Co...........................		400	00			400	00		
Donaldson & Co...........................		992	24			992	24		
Storage and Advertising.................		25	00	15	00	10	00		
Commission.................................				41	87			41	87
Profit and Loss...................				59	06			59	06
Sprague, Warner & Co				3,750	00			3,750	00
Expense......................................		1,056	85			1,056	85		
		235,661	21	235,661	21	100,104	32	100,104	32

Accts. Balcd.		Dr.		Cr.					
4,965.50	Proof by Totals.								
650.00									
5,750.00	Posted to Cash Acct..................	82,813	00	82,560	46				
3,785.00	Posted from Cash to all Accts...	82,560	46	82,813	00				
3,740.70	Posted from Journal to Mdse	48,925	50	22,906	50				
1,675.00	Posted from Journal to Sundry								
1,509.07	Accts	47,153	77	73,172	77				
1,162.50									
1,278.75		261,452	73	261,452	73				
575.00	Less Accts. Balanced during								
700.00	month...	25,791	52	25,791	52				
25,791 52	Trial Balance should foot..........	235,661	21	235,661	21				

PROOF OF TRIAL BALANCE BY DIFFERENCES, JAN. 31, 1890.

DEBIT SIDE.	INCREASE.		DECREASE.		CREDIT SIDE.	INCREASE.		DECREASE.	
Previous Balance........	00, 000	00			Previous Balance......	00, 000	00		
Mdse. Cr. Purch., mo...	48, 925	50			B. K. Marshall............	25, 000	00		
Mdse. Cash Purch.,mo.	272	80			B. S. Knowlton..........	25, 000	00		
Expense Account........	1, 056	85			Mdse. Cr. Purch., mo.	48, 925	50		
Cash Balance..............	252	54			Mortgage Payable.....	10, 000	00		
Bank Balance..............	47, 608	28			Bills P'b'le ac. R'l Est.	4, 850	00		
Freight Account.........	727	60			Bills Payable ac.Mdse.				
Real Estate.................	13, 500	00			Co. A.....................	1, 509	07		
Furniture and Fixtur's	1, 500	00			Interest and Dis. Bal..	915	57		
Storage and Adv. Bal..	10	00			Shipment to Memphis				
					ac. Profit...............	116	25		
Total Increase............	113, 853	57			Commission..............	41	87		
Mdse. Cash Sales........			6, 368	60	Profit and Loss.........	59	06		
Mdse. Cr. Sales, Kirk									
& Co.....................			281	25	Total Increase...........	116, 417	32		
Mdse.Ship.to M'mph's			697	50	Cash pay'ts ac. Mdse.				
Mdse.Co.A,Frt. & Stor.			65	00	P. N. & Co..............			4, 965	50
Cash Received on Ac..			1, 075	00	Cash pay'ts ac. Mdse.				
Cash Rec'd on Bills Rec			5, 261	90	O. T. Co.................			5, 750	00
					Cash pay'ts ac. Mdse.				
					McV. & Co.............			3, 785	00
					Cash pay'ts ac. Mdse.				
					H. & Co.................			1, 162	50
					Cash pay'ts ac. Mdse.				
					J. K. & Co...........			368	75
					Mdse. pay'ts ac. J. K.				
					& Co.....................			281	25
Total to be deducted...	13, 749	25	13, 749	25	Total to be deducted..	16, 313	00	16, 313	00
Trial Bal. should foot..	100, 104	32			Trial Bal. should foot	100, 104	32		

In this illustration, as it is the commencement of the business, we have no previous trial balance to take into account.

The debit side of the trial balance will be increased by the credit and cash purchases of merchandise, as, the balance of that account being on the debit side, they represent that much of an asset; it will be increased by the balance in bank and cash on hand, as they also represent a part of the assets; by the cost of real estate and furniture and fixtures, for the same reason, and by the net amount charged to Expense, Freight and Storage and Advertising, as they represent an apparent asset until closed by Profit and Loss.

The debit side will be decreased by the cash sales of merchandise and by credit sales of the same to persons having a credit balance, as it is an exchange of one form of asset for another, which has been accounted for in the Cash and Merchandise accounts; by the receipts on Bills Receivable and accounts showing a debit balance, as they decrease the assets, and by the amounts credited to shipments of merchandise on joint account, as they represent an apparent reduction of assets; also, by the cash payments for freight and charges for storage and advertising on property received on joint account, where those accounts (i. e., Storage and Advertising) show a debit balance, as they also diminish the apparent assets.

The credit side will be increased by the investment in the business, as it is a liability of the business; by the credit purchases of merchandise, as they represent the amount of liability incurred for the same; by the Mortgages and Bills Payable given for the purchase of property, other than merchandise, as they are not shown in the credit purchases of merchandise and constitute a liability; by the net amount to the credit of shipments on joint account, as they represent an apparent liability until closed by Profit and Loss, and by the net amount to the credit of Interest and Discount, Commission and Profit and Loss, as they are apparent liabilities.

The credit side will be decreased by all payments, either in cash or merchandise, on Bills Payable and accounts showing a credit balance, as they diminish the apparent liabilities.

The proof in the accompanying illustrations has been made more in detail than is necessary, in order that it may be more readily understood.

3

MERCANTILE BOOKS:—Continued.

DAY BOOK, CASH BOOK, JOURNAL AND LEDGER.

TRIAL BALANCE BY TOTALS AND DIFFERENCES.

PROOFS BY TOTALS AND DIFFERENCES.

February 1st, 1890.

Sold Fisher & Kellogg, City,				
100 cases Canned Goods, asstd.....@ 6.75	675	00		
50 lbs. Climax Plug..........................@ 40	20	00		
1 m. Key West Cigars...................	50	00	745	00
2d.				
Sold A. H. Jones & Co., Denver, Col.,				
25 cases Champagne Piper Heidsick,				
pts.....................................@ 26.50	662	50		
25 cases Champagne Piper Heidsick,				
qts......................................@ 24.50	612	50	1,275	00
4th.				
Sold H. Wilson & Co., Fargo, Dak.,				
5 bbls. Sugar, 1,475 lbs.................@ 10	147	50		
2 bbls. Syrup, 92 gals.....................@ 55	50	60		
250 lbs. Rio Coffee.........................@ 25	62	50		
100 lbs. Java Coffee...................... @ 28	28	00		
200 lbs. Y. H. Tea..........................@ 50	100	00		
Cartage.........		50	389	20
5th.				
Sold E. H. Taylor & Co., Stillwater,				
10 bbls. Mess Pork......................@ 15.20	152	00		
1,250 lbs. Bacon.............................@ 10	125	00		
50 cases Canned Goods, asstd......@ 6.75	337	50		
Cartage.........		50	615	00
6th.				
Sold P. H. Kelly & Co., City,				
25 bbls. Mess Pork.....................@ 15.10	377	50		
5,000 lbs. Bacon Sides ....@ 9	450	00	827	50
7th.				
Sold Donaldson & Co., St. Cloud,				
100 lbs. Climax Plug......................@ 50	50	00		
100 lbs. P. H. Plug.........................@ 55	55	00		
2 m. Key West Cigars...............@ 50.00	100	00		
1 m. G. M. Cigars.................................	35	00	240	00
8th.				
Bot. of Sprague, Warner & Co.,				
Mdse., as per invoice.............................	1,825	00		
9th.				
Sold W. H. Johnson & Co., Brainerd,				
10 bbls. Sugar, 3.150 lbs ....@ 10	315	00		
5 bbls. Syrup, 210 gals....................@ 55	115	50		
Cartage........		50	431	00
11th.				
Sold H. P. Upham & Co., for their note @				
60 days,				
10 m. Key West Cigars..............@ 47.50	475	00		
10 m. G. M. Cigars....................@ 34.00	340	00	815	00

February 12th, 1890.

Sold Fisher & Kellogg,				
20 boxes Soap, 1,200 lbs ....@ 4	48	00		
500 lbs. Lard..................................@ 10	50	00		
1,000 lbs. Bacon.............................@ 10	100	00		
250 lbs. Java Coffee.........................@ 28	70	00		
150 lbs. Rio Coffee.......... ....@ 25	37	50	305	50
13th.				
Sold P. H. Kelly & Co.,				
250 cases Canned Goods, asstd.....@ 6.25	1,562	50		
14th.				
Sold Allen, Moon & Co., for their note @				
30 days,				
10 m. H. C. Conchas, imported...@ 75.00	750	00		
15th.				
Sold Donaldson & Co., St. Cloud,				
50 cases Canned Goods, asstd......@ 6.75	337	50		
50 boxes Soap, 3,000 lbs ....@ 4	120	00		
1,000 lbs. Lard ....@ 10	100	00		
5 bbls. Coal Oil, 225 gals.................@ 11	24	75		
Cartage.........		50	581	75
16th.				
Sold E. H. Taylor & Co., Stillwater,				
5 m. Key West Cigars.............. @ 50.00	250	00		
5 m. G. M. Cigars......................@ 34.00	170	00		
5 bbls. Sugar, 1,625 lbs......:...........@ 10	162	50		
5 bbls. Syrup, 125 gals....................@ 55	68	75		
Cartage.........		50	651	75
18th.				
Sold Jas. Walker & Co., for their note @				
60 days,				
1,000 lbs. Climax Plug...................@ 45	450	00		
500 lbs. P. H. Plug ....@ 50	250	00		
5 m. H. C. Conchas, imported.....@ 75.00	375	00	1,075	00
19th.				
Sold H. Wilson & Co.,				
1,000 lbs. Bacon.............................@ 10	100	00		
1,000 lbs. Lard ....@ 10	100	00		
50 boxes Soap, 3,000 lbs ....@ 4	120	00		
10 bbls. Coal Oil, 445 gals.......... .. @ 11	48	95		
10 bbls. Mess Pork....................@ 15.40	154	00		
Cartage.........	1	00	523	95

February 20th, 1890.

Sold P. H. Kelly & Co.,				
10 m. H. C. R. V. Cigars, imported. @ 125.00	1,250	00		
21st.				
Sold W. H. Johnson & Co., Brainerd,				
500 lbs. Java Coffee.........................@ 28	140	00		
500 lbs. Rio Coffee ....@ 25	125	00		
250 lbs. Y. H. Tea...........................@ 50	125	00		
5 m. G. M. Cigars......................@ 35.00	175	00		
Cartage.........		50	565	50
22d.				
Sold Donaldson & Co., St. Cloud,				
5 bbls. Mess Pork......................@ 15.45	77	25		
1,500 lbs. Bacon...............................@ 10	150	00		
2,000 lbs. Lard ....@ 10	200	00		
100 boxes Soap, 6,000 lbs.................@ 4	240	00		
Cartage.........	1	50	668	75
23d.				
Sold H. Wilson & Co.,				
5 m. G. M. Cigars......................@ 35 00	175	00		
5 m. Punch Cigars.....................@ 25 00	125	00		
100 lbs. Climax Plug.......................@ 48	48	00	348	00
25th.				
Bot. for note @ 60 days, of Perry, Nichols & Co.,				
Mdse., as per invoice.............................	2,560	25		
26th.				
Sold P. H. Kelly & Co.,				
150 cases Canned Goods, asstd.....@ 6.50	975	00		
27th.				
Sold H. Wilson & Co.,				
100 lbs. Tea...................................@ 48	480	00		
500 lbs. Rio Coffee....... ....@ 24	120	00		
Cartage.........		25	600	25
28th.				
Sold P. H. Kelly & Co.,				
5 m. H. C. Concha Cigars, imptd...@ 75.00	375	00		
5 m. Key West Cigars.................@ 48.00	240	00	615	00

1890.		DR. CASH.	MDSE.		SUNDRIES.		BALANCES.	
Feb.	1	To Balance on hand...............................					252	54
		" First National Bank...........................			3,075	00		
		" Mdse., per Sales Book........................	565	80				
	2	" First National Bank...........................			2,700	00		
		" Mdse., per Sales Book........................	495	00				
	4	" H. Wilson & Co..........			250	00		
		" First National Bank...........................			50	00		
		" Mdse., per Sales Book...........	675	25				
	5	" P. H. Kelly & Co...............................			400	00		
		" Mdse., per Sales Book........................	434	60				
	6	" First National Bank Stock Dividend.			250	00		
		" Mdse., per Sales Book........................	656	25				
	7	" Donaldson & Co......................			500	00		
		" First National Bank...........................			250	00		
		" Mdse., per Sales Book........................	346	15				
	8	" First National Bank...........................			2,200	00		
		" Mdse., per Sales Book........................	845	00				
	9	" First National Bank...........................			1,509	07		
		" Mdse., per Sales Book........................	465	20				
	11	" First National Bank........................			900	00		
		" Mdse., per Sales Book........................	324	85				
	12	" Fisher & Kellogg........................... ...			82	39		
		" Mdse., per Sales Book........................	275	80				
	13	" First National Bank...........................			2,667	50		
		" Interest and Discount P. L. & C........			82	50		
		" Mdse., per Sales Book......	540	20				
	14	" Mdse., per Sales Book........................	734	25				
	15	" Donaldson & Co...............................			350	00		
		" Mdse., per Sales Book.....	675	00				
	16	" E. H. Taylor & Co..............................			500	00		
		" Mdse., per Sales Book........................	564	00				
	18	" H. Wilson & Co...............................			600	00		
		" Mdse., per Sales Book........................	445	25				
	19	" W. H. Johnson & Co..........................			550	00		
		" Mdse , per Sales Book........................	367	50				
	20	" Mdse., per Sales Book........................	645	00				
	21	" Mdse., per Sales Book........................	525	30				
	22	" A. H. Jones & Co......................			1,000	00		
		" Mdse., per Sales Book........................	742	25				
	23	" First National Bank...........................			14,000	00		
	25	" Donaldson & Co...............			350	00		
		" Mdse., per Sales Book.....	427	35				
	26	" First National Bank...........................			3,750	00		
		" Mdse., per Sales Book........................	648	20				
	27	" P. H. Kelly & Co...............................			827	50		
		" Mdse., per Sales Book........................	546	35				
	28	" H. Wilson & Co..........................			525	00		
		" Mdse., per Sales Book........................	872	20				
		To Mdse. total for month........................	12,816	75				
		To Sundries for month..............			37,368	96		
		To Cash grand total................................					50,185	71
							50,438	25
Mch.	1	To Balance on hand..................					163	94

1890.			CR. CASH.	EXPENSES.		SUNDRIES.		BALANCES.	
Feb.	1		By C. A. Pillsbury & Co...........................			3,075	00		
			" Expense, Sundries.................	8	90				
	2		" Armour Packing Co...........................			2,700	00		
	4		" Expense, Gas 50.00, Sundries 4.85......	54	85				
			" First National Bank, Deposit............			1,750	00		
	5		" First National Bank, Deposit............			800	00		
			" Expense, Sundries...........................	12	65				
	6		" First National Bank, Deposit			1,250	00		
			" Expense, Sundries...........................	5	10				
	7		" Jas. Wilson & Co.........			250	00		
			" First National Bank, Deposit............			500	00		
			" Expense, Sundries..........	6	75				
	8		" Mortgage Payable............................			2,000	00		
			" Interest and Discount on Mortgage...			200	00		
	9		" Bills Payable, Fink & Co...................			1,509	07		
			" First National Bank, Deposit............			800	00		
			" Expense, Sundries...........................	14	50				
	11		" N. K. Fairbanks & Co.......................			900	00		
			" Expense, Sundries........................	8	60				
			" Freight			18	50		
	12		" First National Bank, Deposit.............			782	39		
			" Expense, Sundries...........................	13	25				
	13		" Bills Payable, P. L. & Co...................			2,750	00		
			" Expense, Sundries...........................	3	40				
	14		" Expense, Pay Roll.............	212	50				
			" Expense, Sundries...........................	4	25				
	15		" Mdse., per Invoice...........................			795	50		
			" Expense, Sundries.....	3	65				
	16		" First National Bank, Deposit............			2,000	00		
			" Expense, Sundries...........................	4	45				
	18		" First National Bank, Deposit............			1,600	00		
			" Expense, Sundries...........................	3	20				
	19		" Expense, Sundries...........................	9	40				
	20		" Mdse., per Invoice...........................			625	00		
	21		" Expense, Sundries...........................	6	85				
	22		" First National Bank, Deposit............			3,100	00		
	23		" Bills Payable, Eureka Packing Co.....			14,000	00		
			" Expense, Sundries...........................	12	80				
	25		" Expense, Sundries....	6	25				
	26		" Sprague, Warner & Co.........			3,750	00		
	27		" Expense, Sundries.......	5	60				
	28		" Expense, Sundries...........................	9	40				
			" Expense, Pay Roll.........	212	50				
			" First National Bank, Deposit............			4,500	00		
			By Expense total for month....................	618	85				
			By Sundries total for month...................			49,655	46		
			By Cash grand total.............					50,274	31
			By Balance on hand............................ ...					163	94
								50,438	25

Mdse.		Sundries.			February 1st, 1890.	Sundries.		Mdse.	
		745	00		Fisher & Kellogg, Dr. to Mdse.............			745	00
		1,275	00		2d. A. H. Jones & Co., Dr. to Mdse...........			1,275	00
		389	20		4th. H. Wilson & Co., Dr. to Mdse...........			389	20
		615	00		5th. E. H. Taylor & Co., Dr. to Mdse.........			615	00
		827	50		6th. P. H. Kelly & Co., Dr. to Mdse...........			827	50
		240	00		7th. Donaldson & Co., Dr. to Mdse.............			240	00
1,825	00				8th. Mdse. Dr. to Sprague, Warner & Co...	1,825	00		
		431	00		9th. W. H. Johnson & Co., Dr. to Mdse......			431	00
		815	00		11th. Bills Receivable, Dr. to Mdse.............			815	00
		305	50		12th. Fisher & Kellogg, Dr. to Mdse..			305	50
		1,562	50		13th. P. H. Kelly & Co., Dr. to Mdse...........			1,562	50
		750	00		14th. Bills Receivable, Dr. to Mdse........			750	00
		581	75		15th. Donaldson & Co., Dr. to Mdse........			581	75
		651	75		16th. E. H. Taylor & Co., Dr. to Mdse.........			651	75
		1,075	00		18th. Bills Receivable, Dr. to Mdse.............			1,075	00
		523	95		19th. H. Wilson & Co., Dr. to Mdse...........			523	95
		565	50		21st. W. H. Johnson & Co., Dr. to Mdse.....			565	50
		668	75		22d. Donaldson & Co., Dr. to Mdse.........			668	75
1,825	00	12,022	40		..............Carried Forward....	1,825	00	12,022	40

Mdse.		Sundries.		February 23d, 1890.	Sundries.		Mdse.	
1,825	00	12,022	40	...............*Brought Forward*................	1,825	00	12,022	40
		348	00	H. Wilson & Co., Dr. to			348	00
				Mdse..........				
				25th.				
2,560	25			Mdse., Dr. to	2,560	25		
				Bills Payable.............…...				
				26th.				
		975	00	P. H. Kelly & Co., Dr. to			975	00
				Mdse.........				
				27th.				
		600	25	H. Wilson & Co., Dr. to			600	25
				Mdse..........				
				28th.				
		615	00	P. H. Kelly & Co., Dr. to			615	00
				Mdse..........				
4,385	25			Mdse. Dr. for total purchases for mo.			14,560	65
				Mdse. Cr. for total sales for mo......				
4,385	25	14,560	65		4,385	25	14,560	65

B. K. Marshall.

						1890 Feb.	1	By Brot. from.........	L.A.	25,000	00

B. S. Knowlton.

						Feb.	1	By Brot. from.........	L.A.	25,000	00

First National Bank.

1890 Feb.	1	To Brot. from.........	L.A.	64,141	99	Feb.	1	By Brot. from.........	L.A.	16,533	71
	4	" Cash Deposit...		1,750	00		1	" Cash Checks.....		3,075	00
	5	" Cash Deposit...		800	00		2	" Cash Checks.....		2,700	00
	6	" Cash Deposit...		1,250	00		4	" Cash Checks....		50	00
	7	" Cash Deposit...		500	00		7	" Cash Checks.....		250	00
	9	" Cash Deposit...		800	00		8	" Cash Checks.....		2,200	00
	12	" Cash Deposit...		782	39		9	" Cash Checks....		1,509	07
	16	" Cash Deposit...		2,000	00		11	" Cash Checks....		900	00
	18	" Cash Deposit...		1,600	00		13	" Cash Checks.....		2,667	50
	22	" Cash Deposit...		3,100	00		23	" Cash Checks.....		14,000	00
	28	" Cash Deposit...		4,500	00		26	" Cash Checks.....		3,750	00

Merchandise.

Feb.	1	To Brot. from.........	L.A.	49,198	30	Feb.	1	By Brot. from.........	L.A.	29,275	10
	15	" Cash................		795	50		28	" Cash S'ls for mo		12,816	75
	20	" Cash................		625	00		28	" Sundries Sales			
	28	" Sundries..........		4,385	25			for mo...........		14,560	65

Cash.

Feb.	1	To Brot. from.........	L.A.	82,813	00	Feb.	1	By Brot. from.........	L.A.	82,560	46
	28	" Receipts for mo		50,185	71		28	" Disb'mts for mo		50,274	31

Freight.

Feb.	1	To Brot. from.........	L.A.	727	60						
	11	" Cash................		18	50						

Interest and Discount.

1890 Feb.						1890 Feb.					
	1	To Brot. from....... .	L.A.	254	47		1	By Brot. from...... ..	L.A.	1,170	04
	8	" Cash		200	00		13	" Cash P. L.& Co.		82	50

Real Estate.

Feb.	1	To Brot. forward...	L.A.	13,500	00						

Furniture and Fixtures.

Feb.	1	To Brot. forward...	L.A.	1,500	00						

Mortgage Payable.

Feb.	8	To Cash		2,000	00	Feb.	1	By Brot. from.........	L.A.	10,000	00

Bills Payable.

Feb.	9	To Cash................		1,509	07	Feb.	1	By Brot. from.........	L.A.	23,109	07
	13	" Cash.................		2,750	00		25	" Mdse.....		2,560	25
	23	" Cash................		14,000	00						

Bills Receivable.

Feb.	1	To Brot. from.........	L.A.	9,878	40	Feb.	1	By Brot. from.........	L.A.	5,261	90
	11	" Mdse...............		815	00						
	14	" Mdse...............		750	00						
	18	" Mdse............		1,075	00						

C. A. Pillsbury & Co., Minneapolis.

Feb.	1	To Cash................		3,075	00	Feb.	1	By Brot. from.........	L.A.	3,075	00

Armour Packing Co., Chicago.

1890 Feb.	2	To Cash..............		2,700	00	1890 Feb.	1	By Brot. from........	L. A.	2,700	00

New York Refining Co., New York.

						Feb.	1	By Brot. from........	L. A.	5.187	50

A. H. Jones & Co., Denver.

Feb.	1	To Brot. from........	L. A.	1,234	00	Feb.	22	By Cash..............		1,000	00
	2	" Mdse..............		1,275	00						

N. K. Fairbanks & Co., Chicago.

Feb.	11	To Cash..............		900	00	Feb.	1	By Brot. from........	L. A.	900	00

H. Wilson & Co., Fargo.

Feb.	1	To Brot. from........	L. A.	834	97	Feb.	4	By Cash..............		250	00
	4	" Mdse..............		389	20		18	" Cash..............		600	00
	18	" Mdse..............		523	95		28	" Cash..............		525	00
	23	" Mdse..............		348	00						
	27	" Mdse...		600	25						

W. H. Johnson & Co., Brainerd.

Feb.	1	To Brot. from........	L. A.	1,375	75	Feb.	1	By Brot. from........	L. A.	750	00
	9	" Mdse..............		431	00		19	" Cash.		550	00
	21	" Mdse..............		565	50						

Fisher & Kellogg, City.

Feb.	1	To Brot. from..	L. A.	157	39	Feb.	1	By Brot. from........	L. A.	75	00
	1	" Mdse..............		745	00		12	" Cash..............		82	39
	12	" Mdse..............		305	50						

E. H. Taylor & Co., Stillwater.

1890 Feb.						1890 Feb.					
Feb.	1	To Brot. from....	L. A.	740	00	Feb.	1	By Brot. from.........	L. A.	250	00
	5	" Mdse.........		615	00		16	" Cash................		500	00
	16	" Mdse...............		651	75						

First National Bank Stock.

Feb.	1	To Brot. from.........	L. A.	6,250	00	Feb.	6	By Cash Dividend		250	00

James Wilson & Co., City.

Feb.	6	To Cash................		250	00	Feb.	1	By Brot. from.........	L. A.	250	00

Shipment to Memphis.

Feb.	1	To Brot. from.........	L. A.	581	25	Feb.	1	By Brot. from.........	L. A.	697	50

P. H. Kelly & Co., City.

Feb.	1	To Brot. from.........	L. A.	400	00	Feb.	5	By Cash.		400	00
	6	" Mdse......		827	50		27	" Cash................		827	50
	13	" Mdse.........		1,562	50						
	26	" Mdse...............		975	00						
	28	" Mdse...............		615	00						

Donaldson & Co., St. Cloud.

Feb.	1	To Brot. from........	L. A.	992	24	Feb.	7	By Cash................		500	00
	7	" Mdse...............		240	00		15	" Cash................		350	00
	15	" Mdse...............		581	75		25	" Cash................		350	00
	22	" Mdse...............		668	75						

Storage and Advertising.

Feb.	1	To Brot. from.........	L. A.	25	00	Feb.	1	By Brot. from.........	L. A.	15	00

Commission.

					1890 Feb.	1	By Brot. from.........	L. A.	41	87

Profit and Loss.

					Feb.	1	By Brot. from.......	L. A.	59	06

Sprague, Warner & Co., Chicago.

1890 Feb.	26	To Cash...............		3,750	00	Feb.	1 8	By Brot. from......... " Mdse...............	L. A.	3,750 1,825	00 00

Expense.

Feb.	1 28	To Brot. from......... " Cash...............	L. A.	1,056 618	85 85						

TRIAL BALANCE B. K. MARSHALL & CO., FEB. 28TH, 1890.

Names.	L.F.	Totals.				Differences.			
B. K. Marshall				25,000	00			25,000	00
B. S. Knowlton				25,000	00			25,000	00
First National Bank		81,224	38	47,635	28	33,589	10		
Merchandise		55,004	05	56,652	50			1,648	45
Cash		132,998	71	132,834	77	163	94		
Freight		746	10			746	10		
Interest and Discount		454	47	1,252	54			798	07
Real Estate		13,500	00			13,500	00		
Furniture and Fixtures		1,500	00			1,500	00		
Mortgage Payable		2,000	00	10,000	00			8,000	00
Bills Payable		18,259	07	25,669	32			7,410	25
Bills Receivable		12,518	40	5,261	90	7,256	50		
New York Refining Co				5,187	50			5,187	50
A. H. Jones & Co		2,509	00	1,000	00	1,509	00		
H. Wilson & Co		2,696	37	1,375	00	1,321	37		
W. H. Johnson & Co		2,372	25	1,300	00	1,072	25		
Fisher & Kellogg		1,207	89	157	39	1,050	50		
E. H. Taylor & Co		2,006	75	750	00	1,256	75		
First National Bank Stock		6,250	00	250	00	6,000	00		
Shipment to Memphis		581	25	697	50			116	25
P. H. Kelly & Co		4,380	00	1,227	50	3,152	50		
Donaldson & Co		2,482	74	1,200	00	1,282	74		
Storage and Advertising		25	00	15	00	10	00		
Commission				41	87			41	87
Profit and Loss				59	06			59	06
Sprague, Warner & Co		3,750	00	5,575	00			1,825	00
Expense		1,675	70			1,675	70		
		348,142	13	348,142	13	75,086	45	75,086	45

Accts. Balanced. Proof by Totals.	Dr.		Cr.	
3,075.00 Trial Balance, January	235,661	21	235,661	21
2,700.00 Posted from Journal, Sundries	14,560	65	4,385	25
900.00 Posted from Journal, Mdse	4,385	25	14,560	65
250.00 Posted from Cash, all accounts	50,274	31	50,185	71
6,925.00				
Posted from Cash to Cash	50,185	71	50,274	31
	355,067	13	355,067	13
Less acct. bal'cd. during month	6,925	00	6,925	00
Trial Balance should foot	348,142	13	348,142	13

PROOF OF TRIAL BALANCE BY DIFFERENCES, FEB. 28th, 1890.

DEBIT SIDE.	INCREASE.		DECREASE.		CREDIT SIDE.	INCREASE.		DECREASE.	
January Balance.........	100, 104	32			January Balance.......	100, 104	32		
Mdse. Balance............	1,648	45			Mdse. Balance..........	1,648	45		
Mdse. Cash Purchases					Mdse. Credit Purch..	4,385	25		
for month.................	1,420	50			Interest Received......	82	50		
Mdse.Credit Purchases									
for month................	4,385	25			Total Increase..........	106, 220	52		
Expense for month......	618	85							
Freight for month.......	18	50			Payments Bills P'ble				
					and Accts.............			30, 934	07
Total Increase..........	108, 195	87			Payments Interest....			200	00
Mdse. Cash Sales mo...			12, 816	75	Total to be dedctd.	31, 134	07	31, 134	07
Cash Decrease in Bal ..			88	60					
Bank Decrease in Bal..			14, 019	18	Trial Bal. sh'd foot	75, 086	45		
Cash Recd. on Accts...			6, 184	89					
Total to be deducted	33, 109	42	33, 109	42					
Trial Bal. should foot	75, 086	45							
					Payments—				
					Mortgage Payable....	2, 000	00		
Received on Acct—	1, 000	00			Bills Payable............	18, 259	07		
	1, 375	00			Accounts—				
	550	00			3,075.00				
	82	39			2,700.00				
	750	00			900.00				
	1, 227	50			250.00				
	1, 200	00			3,750.00	10, 675	00		
	6, 184	89			Total Payments..... .	30, 934	07		

In this illustration, in making up the proof, we start with the footing of the previous month's trial balance, and as the balance of the Merchandise account has changed to the credit side, we use that balance to increase the debit side or assets, as it represents that much of the amounts due from personal accounts. The purchases of merchandise for cash and credit are used, as before, and for the same reason, as are the amounts paid during the month for expense and freight.

The debit side is decreased by the cash sales of merchandise, as before, and by the decrease or difference in the amount of the balance in bank and cash during the month, as the assets are reduced by that difference; also, by the receipts on Bills Receivable and other accounts, as previously explained.

The credit balance of the previous month is increased by the balance of Merchandise account, it having changed to the credit side. That account now shows an apparent liability. It is also increased by the credit purchases (as they represent the liability incurred to others), and by the net amount of interest received during the month.

The credit side is decreased by the payments on Mortgage Payable, Bills Payable and other accounts, as before.

4

March 1st.

Recd. of Swift & Co., Chicago, to be sold on joint acct., each ½ (Mdse. Co. B),				
500 bbls. Mess Pork...................@ 12.00	6,000	00		
50,000 lbs. Lard ....@ 8	4,000	00	10,000	00
2d.				
Bot. for our note, @ 3 mos., of Eureka Packing Co., San Francisco,				
Canned Goods, as per invoice................	5,000	00		
4th.				
Sold Allen, Moon & Co., from Mdse. Co. B, for their note @ 30 days,				
100 bbls. Mess Pork...................@ 14.00	1,400	00		
5th.				
Sold Fisher & Kellogg,				
500 lbs. Bacon................................@ 10	50	00		
200 lbs. Lard.................................@ 10	20	00		
2 bbls. Coal Oil, 90 gals..................@ 11	9	90	79	90
6th.				
Sold P. H. Kelly & Co.,				
100 cases Canned Goods, asstd.....@ 6.50	650	00		
From Mdse. Co. B...........................				
10,000 lbs. Lard ....@ 9½	950	00	1,600	00
7th.				
Bot. of Perry, Nichols & Co., for our note @ 3 mos.,				
Mdse., as per invoice...........................	4,625	00		
8th.				
Recd. of A. H. Jones & Co., Denver,				
Their note @ 30 days, to balance acct..	1,509	00		
9th.				
Sold Gustav Willius, in exchange for Lot 5, Blk 6, Willius' Add. to St. Paul,				
50 shares First Natl. Bank Stock,@ 140.00	7,000	00		
11th.				
Sold E. H. Taylor & Co.,				
2 bbls. Sugar, 495 lbs....................@ 10	49	50		
2 bbls. Syrup, 85 gals....................@ 55	46	75		
100 lbs. Java Coffee........................@ 28	28	00		
200 lbs. Rio...................................@ 25	50	00		
Cartage.........		50	174	75

March 12th.

Bot. of Washburn Milling Co., for our note @ 30 days,				
1,000 bbls. Flour.................@ 5.50	5,500	00		
And shipped the same to C. S. Morey & Co, Denver, Col., on joint acct., each ½.				

13th.

Sold Donaldson & Co.,				
100 cases Canned Goods, asstd.....@ 6.75	675	00		
2 m. G. M. Cigars.....................@ 67.50	135	00		
2 m. P. B. Cigars.......................@ 35.00	70	00		
Cartage.........		50	880	50

14th.

Sold J. L. Terry,				
Lot 5, Blk 6, Willius' Add., for..............			7,500	00
On which we took a mortgage at 2 and 3 years, @ 6%, for...............................	5,000	00		
Balance Cash, as per Cash Book..2,500.00				

15th.

Sold H. Wilson & Co., from Mdse. Co. B,				
50 bbls. Mess Pork.....................@14.25	712	50		
2,000 lbs. Lard ....@ 9¾	195	00		
Cartage.........	1	00	908	50

16th.

Sold W. H. Johnson & Co.,				
50 boxes Soap, 3,000 lbs..................@ 4	120	00		
1,000 lbs. Lard ....@ 10	100	00		
1,000 lbs. Bacon..............................@ 10	100	00		
100 lbs. Climax Plug.......................@ 50	50	00		
Cartage.........		50	370	50

18th.

Sold H. Wilson & Co.,				
100 cases Canned Goods..............@ 6 75	675	00		
500 lbs. Java Coffee........................@ 28	140	00		
500 lbs. Rio Coffee ....@ 25	125	00		
100 lbs. Y. H. Tea..........................@ 55	55	00		
Cartage.........		50	995	50

19th.

Sold Fisher & Kellogg,				
2 m. G. M. Cigars.....................@ 67.50	135	00		
3 m. P. B. Cigars......................@ 35.00	105	00		
1 m. Key West Cigars ....@ 50.00	50	00	290	00

March 20th.

Sold Donaldson & Co.,				
3 bbls. Sugar, 800 lbs.....................@ 10	80	00		
2 bbls. Syrup, 85 gals.....................@ 55	46	75		
100 lbs. Java Coffee........................@ 28	28	00		
100 lbs. Rio Coffee..........................@ 25	25	00		
Cartage.........		50	180	25

21st.

Sold Beaupre, Keogh & Co., for note @ 30				
days, from Mdse. Co. B,				
100 bbls. Mess Pork...................@ 14.00	1,400	00		
10,000 lbs. Lard............................@ 9½	950	00	2,350	00

22d.

Sold E. H. Taylor & Co.,				
2 m. Key West Cigars................@ 50.00	100	00		
2 m. G. M. Cigars..................... @ 67.50	135	00		
1 m. P. B. Cigars.......................	35	00		
100 lbs. P. H. Plug...-.........................	55	00	325	00

23d.

Sold Griggs, Howe & Co., for note @ 60				
days,				
200 cases Canned Goods, asstd.....@ 6.60	1,320	00		

25th.

Recd Acct. Sales from C. S. Morey & Co.,			
of shipment of 1,000 bbls. Flour on			
joint acct.,			
Our net gain......................................	575	00	

26th.

Bot. of Sprague. Warner & Co.,			
Mdse., as per invoice............................	2,950	00	

27th.

Sold Allen, Moon & Co., for note @ 30				
days, from Mdse. Co. B,				
150 bbls. Mess Pork......................@ 14.00	2,100	00		
10,000 lbs. Lard ....@ 9½	950	00	3,050	00

28th.

Sold H. Wilson & Co.,				
10 bbls. Sugar, 2,850 lbs..................@ 10	285	00		
5 bbls. Syrup, 215 gals....................@ 55	118	25		
100 lbs. G. P. Tea...........................@ 56	56	00		
100 lbs. Y. H. Tea..........................@ 55	55	00		
Cartage		50	514	75

March 29th.

Sold Donaldson & Co.,					
50 boxes Soap, 3,000 lbs.....................@ 4	120	00			
10 bbls. Coal Oil, 415 gals...............@ 11	45	65			
1,000 lbs. Lard...............................@ 10	100	00			
1,000 lbs. Bacon..............................@ 10	100	00			
Cartage.........	1	50	366	15	

30th.

Sold E. H. Taylor & Co.,					
50 cases Canned Goods, asstd.......@ 6.75	337	50			
10 bbls. Sugar, 2,865 lbs ....@ 10	286	50			
5 bbls. Syrup, 220 gals....................@ 55	121	00			
25 boxes Soap, 1,500 lbs...................@ 4	60	00			
Cartage.........		50	805	50	

1890.		DR. CASH.	MDSE.		SUNDRIES.		BALANCES.	
Mch.	1	To Balance on hand.....................					163	94
		" Mdse., per Sales Book.............	275	80				
	2	" First National Bank...............			575	00		
		" Mdse., per Sales Book.............	226	50				
	4	" Fisher & Kellogg			400	00		
		" Mdse., per Sales Book.............	247	70				
		" First National Bank...............			5, 187	50		
	5	" P. H. Kelly & Co.............			1, 562	50		
		" Mdse., per Sales Book.......	325	90				
		" Mdse., per Sales Book.............	174	25				
		" First National Bank...............			147	25		
	7	" Mdse., per Sales Book.............	287	30				
	8	" Bills Rec., A. H. J. & Co.			1, 509	00		
		" Mdse., per Sales Book.............	210	20				
	9	" E. H. Taylor & Co.................			500	00		
		" Mdse., per Sales Book.............	253	40				
	11	" First National Bank...............			527	00		
		" Mdse., per Sales Book.............	187	50				
	12	" Donaldson & Co.................			600	00		
		" Mdse., per Sales Book.............	310	45				
	13	" Bills Rec., H. P. U. & Co			3, 740	70		
		" Mdse., per Sales Book.............	225	00				
	14	" Real Est., J. L. Terry.............			2, 500	00		
		" Mdse., per Sales Book	260	35				
	15	" H. Wilson & Co.........			750	00		
		" Mdse., per Sales Book.............	231	50				
	16	" Bills Rec., A. M. & Co.............			750	00		
		" Mdse., per Sales Book.............	247	25				
	18	" W. H. Johnson & Co.............			450	00		
		" Mdse., per Sales Book..	280	25				
	19	" First National Bank..............			1, 825	00		
		" Mdse., per Sales Book.............	230	70				
	20	" H. Wilson & Co.....................			850	00		
		" Mdse., per Sales Book.............	241	50				
	21	" Fisher & Kellogg..........			300	00		
		" Mdse., per Sales Book.............	197	40				
	22	" Donaldson & Co			650	00		
		" Mdse., per Sales Book.............	301	55				
	23	" First National Bank..			4, 564	62		
		" Int. and Dis., P. N. & Co...			60	38		
	25	" E. H. Taylor & Co.................			500	00		
		" Mdse., per Sales Book.............	426	75				
	26	" P. H. Kelly & Co..................			975	00		
		" Mdse., per Sales Book.............	201	20				
	27	" H. Wilson & Co.....................			500	00		
		" Mdse., per Sales Book.............	250	00				
	28	" First National Bank...............			4, 906	95		
		" Int. & Dis., E. Pkg. Co............			93	05		
	29	" Donaldson & Co...................			450	00		
		" Mdse., per Sales Book.............	265	30				
	30	" E. H. Taylor & Co.................			900	00		
		" Mdse., per Sales Book.............	195	65				
		To Mdse. Sales for month............	6, 053	40				
					35, 773	95	41, 827	35
							41, 991	29

1890.		CR. CASH.	EXPENSES.		SUNDRIES.		BALANCES.	
Mch.	1	By Expense, Gas 55.00, Sunds. 4.80	59	80				
	2	" Mdse. Co. B, Freight and Ctge			575	00		
		" Expense, Sundries..................	6	85				
	4	" First Natl. Bank, Deposit........			1,000	00		
		" N. Y. Refining Co....................			5,187	50		
		" Expense, Sundries..................	5	45				
	5	" First Natl. Bank, Deposit........			1,862	50		
		" Expense, Sundries........	11	25				
	6	" Freight..........			147	25		
		" Expense, Sundries..................	3	60				
	7	" First Natl. Bank, Deposit........			450	00		
		" Expense, Sundries..................	4	35				
	8	" First Natl. Bank, Dis.............			1,497	93		
		" Int. & Dis., A. H. J. & Co..........			11	07		
	9	" First Natl. Bank, Deposit........			950	00		
		" Expense, Sundries......	7	45				
	11	" Freight..............................			527	00		
		" Expense, Sundries	16	25				
	12	" First Natl. Bank, Deposit..			800	00		
		" Expense	5	30				
	13	" First Natl. Bank, Dis..............			3,723	47		
		" Int. & Dis.H P.U. & Co.............			17	23		
	14	" First Natl. Bank, Deposit........			2,850	00		
	15	" First Natl. Bank, Deposit........			1,000	00		
		" Expense, Pay Roll....................	225	00				
		" Expense, Sundries	18	40				
	16	" First Natl. Bank, Deposit........			1,200	00		
		" Expense, Sundries..................	6	50				
	18	" First Natl. Bank, Deposit........			450	00		
	19	" Sprague, Warner & Co............			1,825	00		
	20	" Expense, Sundries..................	15	25				
		" First Natl. Bank, Deposit.......			1,350	00		
	21	" First Natl. Bank, Deposit........			550	00		
		" Expense, Sundries..................	10	50				
	22	" First Natl. Bank, Deposit........			850	00		
		" Expense, Sundries..................	7	80				
	23	" Bills Payable, P. N. & Co.........			4,625	00		
		" Expense, Sundries..	4	75				
	25	" First Natl. Bank......................			750	00		
		" Expense, Sundries..................	11	20				
	26	" First Natl. Bank, Deposit........			1,375	00		
		" Expense, Sundries.........	12	50				
	27	" First Natl. Bank, Deposit........			750	00		
	28	" Bills Payable, E. Pkg. Co.........			5,000	00		
		" Expense, Sundries..................	6	45				
	29	" First Natl. Bank, Deposit........			450	00		
		" Expense, Sundries..................	8	25				
	30	" Expense, Pay Roll..................	225	00				
		" Expense, Sundries..................	9	40				
		By First Natl. Bank, Deposit.......			1,300	00		
		By Expense for month.................	681	30				
					41,073	95	41,755	25
		By Balance on hand.....................					236	04
							41,991	29

Mdse.		Sundries.			March 1st, 1890.	Sundries.		Mdse.	
		10,000	00		Mdse. Co. B Dr. to Swift & Co............	10,000	00		
					2d.				
5,000	00				Mdse. Dr. to Bills Payable...................	5,000	00		
					4th.				
		1,400	00		Bills Receivable Dr. to Mdse. Co. B......	1,400	00		
					5th.				
		79	90		Fisher & Kellogg, Dr. to Mdse............			79	90
					6th.				

		1,600	00		P. H. Kelly & Co., Dr. to Sundries.
					               Mdse..........
					               Mdse. Co. B.
						950	00	650	00

					7th.				
4,625	00				Mdse. Dr. to Bills Payable...................	4,625	00		
					8th.				
		1,509	00		Bills Receivable Dr. to A. H. Jones & Co.	1,509	00		
					9th.				
		7,000	00		Real Estate Dr. to First Natl. Bank Stock.	7,000	00		
					11th.				
		174	75		E. H. Taylor & Co., Dr. to Mdse.........			174	75
					12th.				
		5,500	00		C. S. Morey & Co., Dr. to Bills Payable.	5,500	00		
					13th.				
		880	50		Donaldson & Co. Dr. to Mdse............			880	50
					14th.				
		5,000	00		Mortgage Receivable Dr. to Real Estate.	5,000	00		
					15th.				
		908	50		H. Wilson & Co., Dr. to Mdse. Co. B...	908	50		
					16th.				
		370	50		W. H. Johnson & Co., Dr. to Mdse......			370	50
					18th.				
		995	50		H. Wilson & Co., Dr. to Mdse..............			995	50
					19th.				
		290	00		Fisher & Kellogg, Dr. to Mdse............			290	00
					20th.				
		180	25		Donaldson & Co., Dr. to Mdse.............			180	25
					21st.				
		2,350	00		Bills Receivable Dr. to Mdse. Co. B.....	2,350	00		
9,625	00	38,238	90		...............Carried Forward................	44,242	50	3,621	40

Mdse.		Sundries.		March 22d, 1890.	Sundries.		Mdse.	
9,625	00	3S,23S	90	.................*Brought Forward*.................	44,242	50	3,621	40
		325	00	E. H. Taylor & Co., Dr. to Mdse.........			325	00
		1,320	00	23d. Bills Receivable Dr. to Mdse...............			1,320	00
		575	00	25th. C. S. Morey & Co., Dr. to Profit and Loss.	575	00		
2,950	00			26th. Mdse. Dr. to Sprague, Warner & Co...	2,950	00		
		3,050	00	27th. Bills Receivable Dr. to Mdse. Co. B.....	3,050	00		
		514	75	28th. H. Wilson & Co., Dr. to Mdse.............			514	75
		366	15	29th. Donaldson & Co., Dr. to Mdse.............			366	15
		805	50	30th. E. H. Taylor & Co., Dr. to Mdse.........			805	50
12,575	00			Mdse. Dr. for total purchases for mo.				
				Mdse. Cr. for total sales for mo......			6,952	80
12,575	00	45,195	30		50,817	50	6,952	80

B. K. Marshall.

						1890 Mch.	1	By Brot. from........	L. B.	25,000	00

B. S. Knowlton.

						Mch.	1	By Brot. from........	L. B.	25,000	00

Merchandise.

1890 Mch.	1 30	To Brot. from........ " Sundries Purchases for mo.	L. B.	55,004 12,575	05 00	Mch.	1 30 30	By Brot. from........ " Cash Sales for month............ " Sunds. Sales for month..........	L. B. 3	56,652 6,053 6,952	50 40 80

Cash.

Mch.	1 30	To Brot. from........ " Rec'pts for mo.	L. B.	132,998 41,827	71 35	Mch.	1 30	By Brot. from.. ...... " Disbmts. for mo	L. B.	132,834 41,755	77 25

First National Bank.

Mch.	1 4 5 7 8 9 12 13 14 15 16 18 20 21 22 25 26 27 29 30	To Brot. from........ " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit... " Cash Deposit...	L. B.	81,224 1,000 1,862 450 1,497 950 800 3,723 2,850 1,000 1,200 450 1,350 550 850 750 1,375 750 450 1,300	38 00 50 00 93 00 00 47 00 00 00 00 00 00 00 00 00 00 00 00	Mch.	1 1 4 6 11 19 23 28	By Brot. from........ " Cash Checks.... " Cash Checks.... " Cash Checks.... " Cash Checks.... " Cash Checks.... " Cash Checks.... " Cash Checks....	L. B.	47,635 575 5,187 147 527 1,825 4,564 4,906	28 00 50 25 00 00 62 95

Freight.

1890 Mch.											
	1	To Brot. from........	L. B.	746	10						
	6	" Cash...............		147	25						
	11	" Cash...............		527	00						

Interest and Discount.

Mch.						1890 Mch					
	1	To Brot. from........	L. B.	454	47		1	By Brot. from........	L. B.	1,252	54
	8	" Cash		11	07		23	" Cash............ ...		60	38
	13	" Cash........		17	23		28	" Cash...............		93	05

Real Estate.

Mch.						Mch.					
	1	To Brot. from........	L. B.	13,500	00		14	By Cash...............		2,500	00
	9	" First National Bank Stock....		7,000	00		14	" Mortgage Rec..		5,000	00

Furniture and Fixtures.

Mch.											
	1	To Brot. from........	L. B.	1,500	00						

Mortgage Payable.

Mch.						Mch.					
	1	To Brot. from.......	L. B.	2,000	00		1	By Brot. from.......	L. B.	10,000	00

Bills Payable.

Mch.						Mch.					
	1	To Brot. from........	L. B.	18,259	07		1	By Brot. from........	L. B	25,669	32
	23	" Cash P.N.& Co		4,625	00		2	" Mdse...............		5,000	00
	28	" Cash E. Pkg.Co		5,000	00		2	" Mdse		4,625	00
							2	" C. S. M. & Co., Shipped to D.		5,500	00

Bills Receivable.

1890 Mch.			L. B.			1890 Mch.			L. B.		
	1	To Brot. from.........	L. B.	12,518	40		1	By Brot. from.........	L. B.	5,261	90
	4	" Mdse. Co. B.....		1,400	00		8	" Cash A. H. J. & Co., Dis.........		1,509	00
	8	" A. H. J. & Co...		1,509	00		13	" Cash H. P. U. & Co., Dis.........		3,740	70
	21	" Mdse. Co. B.....		2,350	00		16	" Cash A.M. & Co		750	00
	23	" Mdse..............		1,320	00						
	27	" Mdse. Co. B.....		3,050	00						

New York Refining Co.

Mch.	4	To Cash...............		5,187	50	Mch.	1	By Brot. from.........	L. B.	5,187	50

A. H. Jones & Co.

Mch.	1	To Brot. from.........	L. B.	2,509	00	Mch.	1	By Brot. from.........	L. B.	1,000	00
							8	" Bills Rec..........		1,509	00
				2,509	00					2,509	00

H. Wilson & Co.

Mch.	1	To Brot. from.......	L. B.	2,696	37	Mch.	1	By Brot. from.........	L. B.	1,375	00
	15	" Mdse. Co. B.....		908	50		15	" Cash...............		750	00
	18	" Mdse		995	50		20	" Cash...............		850	00
	28	" Mdse..............		514	75		27	" Cash...............		500	00

W. H. Johnson & Co.

Mch.	1	To Brot. from.........	L. B.	2,372	25	Mch.	1	By Brot. from.	L. B.	1,300	00
	16	" Mdse..............		370	50		18	" Cash...............		450	00

E. H. Taylor & Co.

Mch.	1	To Brot. from.........	L. B.	2,006	75	Mch.	1	By Brot. from.........	L. B.	750	00
	11	" Mdse..............		174	75		9	" Cash...............		500	00
	22	" Mdse..............		325	00		25	" Cash...............		500	00
	31	" Mdse..............		805	50		30	" Cash...............		900	00

Fisher & Kellogg.

Mch.	1	To Brot. from.........	L. B.	1,207	89	Mch.	1	By Brot. from.......	L. B.	157	39
	5	" Mdse..............		79	90		4	" Cash...............		400	00
	19	" Mdse		290	00		21	" Cash...............		300	00

First National Bank Stock.

1890 Mch.	1	To Brot. from.........	L. B.	6,250	00	1890 Mch.	1 9	By Brot. from......... " Real Estate......	L. B.	250 7,000	00 00

Shipment to Memphis.

Mch.	1	To Brot. from.........	L. B.	581	25	Mch.	1	By Brot. from.........	L. B.	697	50

P. H. Kelly & Co.

Mch.	1 6	To Brot. from......... " Sundries..........	L. B.	4,380 1,600	00 00	Mch.	1 5 26	By Brot. from......... " Cash............... " Cash...............	L. B.	1,227 1,562 975	50 50 00

Donaldson & Co.

Mch.	1 13 20 29	To Brot. from......... " Mdse............... " Mdse............... " Mdse...............	L. B.	2,482 880 180 366	74 50 25 15	Mch.	1 12 22 27	By Brot. from......... " Cash............... " Cash............... " Cash...............	L. B.	1,200 600 650 450	00 00 00 00

Storage and Advertising.

Mch.	1	To Brot. from..	L. B.	25	00	Mch.	1	By Brot. from.........	L. B.	15	00

Commission.

						Mch.	1	By Brot. from.........	L. B.	41	87

Profit and Loss.

						Mch.	1 27	By Brot. from......... " C.S.Morey&Co	L. B.	59 575	06 00

Sprague, Warner & Co.

| 1890 Mch. | 1 19 | To Brot. from........ | L. B. | 3,750 1,825 | 00 00 | 1890 Mch. | 1 26 | By Brot. from........ | L. B. | 5,575 2,950 | 00 00 |
| | | " Cash................ | | | | | | " Mdse... .... | | | |

Expense.

| Mch. | 2 30 | To Brot. from........ | L. B. | 1,675 681 | 70 30 | | | | | | |
| | | " Cash for mo..... | | | | | | | | | |

Swift & Co.

| | | | | | | Mch. | 1 | By Mdse. Co. B...... | | 10,000 | 00 |

Merchandise Co. B.

Mch.	1 1	To Swift & Co.......	L. B.	10,000 575	00 00	Mch.	4 6 15 21 27	By Bills Rec...........		1,400 950 908 2,350 3,050	00 00 50 00 00
		" Cash................						" P H.Kelly & Co			
								" H. Wilson & Co			
								" Bills Rec..........			
								" Bills Rec..........			

C. S. Morey & Co., Denver, Col.

| Mch. | 1 25 | To Bills Payable, Shipm'nt to D | | 5,500 575 | 00 00 | | | | | | |
| | | " Profit and Loss | | | | | | | | | |

Mortgage Receivable.

| Mch. | 14 | To Real Estate...... | | 5,000 | 00 | | | | | | |

TRIAL BALANCE B. K. MARSHALL & CO., MARCH 30, 1890.

NAMES.	L.F.	TOTALS.				DIFFERENCES.			
B. K. Marshall..				25,000	00	.		25,000	00
B. S. Knowlton......................................				25,000	00			25,000	00
Merchandise......		67,579	05	69,658	70			2,079	65
Cash..		174,826	06	174,590	02	236	04		
First National Bank		104,383	28	65,368	60	39,014	68		
Freight.............		1,420	35			1,420	35		
Interest and Discount...		482	77	1,405	97			923	20
Real Estate..		20,500	00	7,500	00	13,000	00		
Furniture and Fixtures		1,500	00			1,500	00		
Mortgage Payable....................		2,000	00	10,000	00			8,000	00
Bills Payable...		27,884	07	40,794	32			12,910	25
Bills Receivable.....................................		22,147	40	11,261	60	10,885	80		
H. Wilson & Co......................................		5,115	12	3,475	00	1,640	12		
W. H. Johnson & Co..............................		2,742	75	1,750	00	992	75		
E. H. Taylor & Co..............		3,312	00	2,650	00	662	00		
Fisher & Kellogg..............................		1,577	79	857	39	720	40		
First National Bank Stock...........		6,250	00	7,250	00			1,000	00
Shipment to Memphis.....................		581	25	697	50			416	25
P. H. Kelly & Co....................................		5,980	00	3,765	00	2,215	00		
Donaldson & Co.....................................		3,909	64	2,900	00	1,009	64		
Storage and Advertising.......................		25	00	15	00	10	00		
Commission........				41	87			41	87
Profit and Loss......................................				634	06			634	06
Sprague, Warner & Co..........................		5,575	00	8,525	00			2,950	00
Expense		2,357	00			2,357	00		
Swift & Co..				10,000	00			10,000	00
Merchandise Co. B................................		10,575	00	8,658	50	1,916	50		
C. S. Morey & Co		6,075	00			6,075	00		
Mortgage Receivable...............		5,000	00			5,000	00		
		481,798	53	481,798	53	88,655	28	88,655	28

Proof by Totals.						Accounts Balanced:			
February Balance..................................		348,142	13	348,142	13			5,187	50
Posted from Journal to Mdse................		12,575	00	6,952	80			2,509	00
Posted from Journal to Sundries Acct...		45,195	30	50,817	50				
Posted from Cash to all accounts..........		41,755	25	41,827	35			7,696	50
Posted to Cash......................................		41,827	35	41,755	25				
		489,495	03	489,495	03				
Less accounts balanced during month...		7,696	50	7,696	50				
Trial Balance Sheet should foot		481,798	53	481,798	53				

PROOF OF TRIAL BALANCE BY DIFFERENCES, MARCH 30, 1890.

DEBIT SIDE.	INCREASE.		DECREASE.		CREDIT SIDE.	INCREASE.		DECREASE.	
Trial Bal. February....	75,086	45			Trial Bal. February...	75,086	45		
Exchange Bk. Stock...	1,000	00			Exchange Bk. Stock..	1,000	00		
Credit Sales for mo.....	6,952	80			Credit Sales for mo...	6,952	80		
Cash Bal. Increase......	72	10			Cash Sales for mo......	6,053	40		
Bank Bal. Increase......	5,425	58			Int. net recd. for mo..	125	13		
Freight for mo............	674	25			Profit and Loss net				
Expense for mo..........	681	30			recd. for mo...........	575	00		
Mdse. Co. B. Cost.......	10,575	00			Swift & Co., Acct.				
Shipment to Denver,					Mdse. Co. B...........	10,000	00		
Cost and Profit........	6,075	00			Bills Pay. Acct. Shipt.				
					to D........................	5,500	00		
Total Increase............	106,542	48							
					Total Increase...........	105,292	78		
Less recd. on acct. and					Less Paymts., Accts.,				
Bills Receivable......	17,887	20			and Bills Payable...	16,637	50		
Trial Bal. should foot..	88,655	28			Trial Bal. should foot.	88,655	28		
Receipts.					Payments.				
Bills Receivable..........			5,999	70	Bills Payable.............			9,625	00
H. Wilson & Co..........			2,100	00	N. Y. Refining Co......			5,187	50
W. H Johnson & Co...			450	00	Sprague,W'ner & Co.			1,825	00
E. H. Taylor & Co.....			1,900	00					
Fisher & Kellogg......			700	00	Total Paym'ts for mo.			16,637	50
P. H. Kelly & Co........			2,537	50					
Donaldson & Co.........			1,700	00					
Real Estate................			2,500	00					
Total Receipts for mo.			17,887	20					

In this illustration the debit side is increased by the difference or profit made on exchange of bank stock for real estate, including the amount previously received for dividend and credited to the bank stock, as it represents an increase in the assets to that extent. The balance of Merchandise account being on the credit side, and having been so for the previous month, the debit side is increased by the credit sales for the month, as they represent the increase of assets for the month by the amount of increase in personal accounts due the business. The balance of cash and in bank being greater than at the close of the former month, the debit side is increased by the difference. In this instance the consignor is credited with the full amount of his shipment in Merchandise Co. B, instead of our share, as before, and the shipment not having been closed out, it creates an apparent asset for its cost, both in cash and credit, and consequently increases the debit side. The shipment on joint account not having been entered into the Merchandise account, and having been charged in full for its cost, and account sales having been rendered the net gain to the consignee, it constitutes an asset, and, therefore, increases the debit side.

The debit side is decreased, as before, taking into account the receipt of cash on real estate, the same as on accounts and Bills Receivable. The credit side is increased by the balance to the credit of bank stock, through the exchange for real estate and for the amount previously to its credit from dividend received. As it now shows an apparent liability, it is increased by the cash and credit sales of merchandise (the balance of that account being on the credit side for the previous and current month), as that account now shows an apparent liability; by the net amount received on Interest and Profit and Loss, as before; by the amount credited the consignee on account of shipment in Merchandise Co. B, as that becomes a liability, and by the liability created by the note given in settlement of the shipment on joint account, as that did not enter into the Merchandise account.

In the foregoing illustrations, while they have been made as full, varied and explicit as possible, it has not been possible to provide for all contingencies that may arise; but by remembering *that everything that goes to increase the assets, real or apparent, increases the*

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debit side, and *everything that diminishes them decreases it;* also, that the credit side *is increased by anything that increases the liabilities, real or apparent*, and *decreased by all that goes to diminish them.*

By applying the above rule no difficulty will be found in making out the proof, no matter how complex and varied the accounts may be.

BALANCE SHEETS.

In connection with the transactions given, a balance sheet has been prepared, showing the state of the business at the close.

The closing entries have been omitted from the Ledger in order to avoid any confusion that might otherwise arise in regard to the trial balances and the methods used for proving the same.

The form of balance sheet used is believed to be the best for the purpose, as it shows in a concise and condensed form the state of the business; the assets and liabilities and what they consist of; the profit and loss and the source of the same; and each partner's net gain or loss and net capital invested in the business; is easily understood and explained.

The ruling of the trial balance books generally used will usually answer the purpose in making it out; if not, it is an easy matter to rule a blank sheet to meet the requirements of the case.

BALANCE SHEET B. K. MARSHALL & CO., MARCH 30, 1890. (B. S. K. Acc't.)

	Trial Balance		Inventory	Assets and Liabilities		Profit and Loss		B. K. Marshall		B. S. Knowlton	
B. K. Marshall		25,000 00							25,000 00		
B. S. Knowlton		25,000 00									25,000 00
Merchandise	236 94	2,079 65	9,530 15	9,530 15			11,609 80				
Cash	39,014 68		39,014 68	39,014 68							
First National Bank			236 04	236 04							
Freight	1,420 35					1,420 35					
Interest and Discount		923 20					923 20				
Real Estate	13,000 00		13,500 00	13,500 00			500 00				
Furniture and Fixt'rs.	1,500 00		1,500 00	1,500 00							
Bills and Mtge. Pa'ble.		20,910 25			20,910 25						
Bills and Mtge. Rec'le.	15,885 80		15,885 80	15,885 80							
Accounts Payable.		12,950 00			12,950 00						
Accounts Receivable.	13,314 91		13,314 91	13,314 91							
Bank Stock											
Shipment to Memph's.		1,000 00					1,000 00				
Storage and Advt'ng.	10 00	116 25				10 00	116 25				
Commission	41 87	634 06				41 87	634 06				
Profit and Loss											
Expense	2,357 00					2,357 00					
Mdse. Co. B	1,916 50	469 98	2,386 48	2,386 48			469 98				
	88,655 28	88,655 28	95,368 06	95,368 06	61,507 81		15,295 16				
			Balance Net Assets	95,368 06							
B. K. Marshall, ½ Net Profit								2,357 00			
B. S. Knowlton, ½ Net Profit											
Profit and Loss						15,295 16	15,295 16				
Balance Net Capital						5,753 91	5,753 90		5,753		5,753
							16	39,753 91	39,753 91	39,753 90	39,753 90
Balance Net Capital								39,753 91	39,753 91	39,753 90	39,753 90

INVERSIONS OR TRANSPOSITIONS.

A very common error in posting or copying from one book or sheet to another is the inversion or reversal of figures, which may be determined by the difference or amount of error, as shown by the trial balance or the footings. If in copying from one book or sheet to another, if an inversion has occurred the difference will always be 9 or a multiple of 9, whose sum, when added together, will be 9.

If the difference should be 9, or any multiple up to 81, it shows that the first two, or right-hand, figures have been transposed. If 90 to 810, the second and third; 900 to 8,100, the third and fourth, and so on. If the difference consists of three or more figures, in which the ones intervening between the outside side ones are 9 or 9s, and the outside ones, when added together, make 9, it would indicate, if there be one 9 intervening, that the first and third figures of some amount had been transposed. If two 9s, the first and fourth, etc. If there should be ciphers on the right of the difference, it would show that the transposition had occurred one place further to the left for each cipher. In order to determine the figures so transposed, ignore the intervening 9 or 9s. As for instance, 486 written 684, the difference being 198, ignoring the 9, we have 18 as the difference between the outside figures transposed, and on reference to the appended table of possible transpositions, we find under 18 the sums 46 and 64, the figures transposed. In all cases of outside transposition the intervening figures will be 9; if any other figures intervene, even if their sum should be 9, it is not an outside transposition.

COMPOUND TRANSPOSITIONS.

Compound transpositions are where there has been two transpositions, either in the same amount or in different ones, but in different denominations, as one in dollars, the other in cents, or one in thousands and hundreds, and the other in tens and units.

They may be of two kinds: First, where both transpositions increase or diminish the original sum; the other, where one increases and the other diminishes it.

If they both increase or diminish the original sum, the difference will always show two sets of nines, that is, the two left hand-figures

will make 9 also; the two right-hand ones, the intervening figures (if any), will be ciphers, as 630,027 or 6,327. Taking no account of the ciphers, the two figures on the right and left respectively will show the difference in each inversion, and by reference to the table, all possible inversions with those figures will be found. If one inversion should increase and the other diminish the original amount, the difference will be a sum whose two right-hand figures, when added together, will be *ten*, and whose intervening ones (if any) will be 9s, and the sum of the whole a multiple of 9, and of the two left-hand ones *eight*.

To determine the difference for the first transposition, deduct the two right-hand figures from 100, which will give the difference for the first transposition; for the second, increase the two left-hand figures by one for the difference of the second; as if the difference or error should be 26,919, deducting 19 from 100 gives 81 as the difference or error for the first inversion. The left-hand figure (26) increased by one (27), the difference for the second inversion. The table under these differences gives all the inversions possible. In case there should be two transpositions in the sum, where they are made partly in the same column, as one in the tens and units and one in the hundreds and tens, to determine by the difference what the difference for each transposition is, and thus know what to look for. The difference will, in such cases, always consist of three figures, not counting any ciphers that may be on the right, as they serve only to indicate the columns in which the transposition has been made.

The rule is as follows, viz.: If they each increase or diminish the original sum, the difference will be made up of two amounts or differences, which, when added together, expressing one as tens and units and the other as hundreds and tens, will make the total difference, as these amounts range from 9 to 81, as seen in the table. One can tell at a glance what they are; as, for example: $\frac{3}{4}\frac{4}{6}\frac{2}{8}\frac{5}{1}$=8,106 written $\frac{3}{4}\frac{2}{6}\frac{4}{1}\frac{5}{8}$=7,863, their difference is 243. It will be seen by the table that 18 written 180, and 63 are the only differences that will make that sum; therefore, 18 is the difference for the transposition between the hundreds and tens, and 63 for that between the tens and units. Opposite those differences in the table will be found the sums 42, 24 and 81, 18. In cases where the middle figure is 9, it would

show that the difference for each transposition was the same, which will be shown by the outside figures; as if $\frac{4581}{3926}$=8,507 be written $\frac{4518}{3296}$=7,814, the difference is 693, which shows that the sums transposed had each a difference of 63. If one of the transpositions increases and the other diminishes the original sum, the difference for each one will be found; for the first, or that between the hundreds and tens, by adding the first two or right-hand figures together, and prefixing the one on the left. The second, or one between the tens and units, by subtracting the original difference from 1,000, and adding the two left-hand figures of the result together, rejecting the ten (if any) in both cases, and annexing the right-hand figure, which will give the difference in each case, except in cases where the sum of the difference is 18; in that event, the left-hand figure should be increased by one for the first difference, and the left-hand figure of the second obtained by adding the two left-hand figures diminished by one. Examples: $\frac{2614}{2713}$=5,327 written $\frac{2641}{2173}$=4,814, their difference is 513; adding the two right-hand figures, 1+3=4; prefixing the left-hand figure gives 54 for the difference for the transposition between the hundreds and tens, 1,000 — 513=487; adding the two left-hand figures of this difference together, rejecting the ten of the result, 4+8=2, annexing the right-hand figure gives 27 as the difference for the second transposition between the tens and units. Or, in the second event, $\frac{3286}{4581}$=7,867 written $\frac{3826}{4518}$=8,344, whose difference, 477, being added together makes 18; therefore, the difference for the first transposition would be 7+7=4; prefixing the left-hand figure 4 increased by 1=5, gives 54 as that difference. For the second transposition we have 1,000 — 477=523; adding the two left-hand figures gives 5+2=7, which diminished by 1=6, annexing the right-hand figure, gives 63 as the difference required.

Reference to the table will give the possible transpositions with those differences. In all cases of transpositions the first or right-hand figure of the difference will indicate the number of possible transpositions that can be made with that difference, and the first figure subtracted from 10 will give the first figure of the possible amounts that may be transposed to make the difference. Increasing the first figure by 11, until you have 9 for the right-hand figure, will, with their reversals, give all the possible combinations that can be transposed to make the difference; as, for instance, if the difference be 27

then it would show that there was seven possible combinations. Taking 7 from 10 gives 3 as the first figure; increasing by 11, gives 14, 25, 36, 47, 58, 69, as the only figures that can be reversed to make that difference.

The following table, prepared in accordance with the foregoing rule, gives all the possible combinations that may be transposed to make the differences, thus enabling you to see, at a glance, what figures to look for, without having to construct a table in each case:

TABLE.

If the difference is 9......	10 / 01	21 / 12	32 / 23	43 / 34	54 / 45	65 / 56	76 / 67	87 / 78	98 / 89
If the difference is 18......		20 / 02	31 / 13	42 / 24	53 / 35	64 / 46	75 / 57	86 / 68	97 / 79
If the difference is 27......			30 / 03	41 / 14	52 / 25	63 / 36	74 / 47	85 / 58	96 / 69
If the difference is 36......				40 / 04	51 / 15	62 / 26	73 / 37	84 / 48	95 / 59
If the difference is 45......					50 / 05	61 / 16	72 / 27	83 / 38	94 / 49
If the difference is 54......						60 / 06	71 / 17	82 / 28	93 / 39
If the difference is 63......							70 / 07	81 / 18	92 / 29
If the difference is 72......								80 / 08	91 / 19
If the difference is 81......									90 / 09

If the correct amount is the largest, the inverted figure will be found in the bottom row; if the least, in the top one.

The above table contains all the transpositions possible to be made with any given difference, and requires no further explanation.

MISPLACEMENTS.

Another very common and troublesome error is that of misplacement of figures,—that is, setting them down one or two places either to the right or left of their proper position, and thus increasing or diminishing the original sum; as, for instance, 27 set down or posted as 270 or 2,700, or *vice versa*,—an error that has heretofore been very difficult to determine, and then only by checking every item until found.

The following rules, which are original with the author, and have never before been published, will enable anyone to determine the exact figures in full (not a part) that have been misplaced or moved

one or more places to the right or left, thus avoiding the tedious process of checking over all the various items making up the sum, as you have the amount in full, giving every figure, and not a part, leaving you to guess and search for the remainder, as the best method heretofore in use does.

In misplacements, as in transpositions, the difference will always be 9 or a multiple of 9, with this difference, that in transpositions the sum of the difference will, when added together, always be 9, except as noted in cases of outside transposition, and then it holds good leaving out the intervening 9 as directed; but in misplacements the difference, when added together, will be 9 or a multiple of 9. If it should be 9, the chances are very strongly in favor of its being a transposition; but if it is a multiple, as 54, 63, etc., then it is certain that it is a misplacement, except in cases of compound transpositions as illustrated.

<div align="center">RULES.</div>

1. Divide the difference or error by 9, which will give the exact sum that has been misplaced or moved one place to the left, which will be the case if the original or correct amount is the least; if it is greater, annex a cipher, which will give the amount moved one place to the right.

2. If the difference should consist of three or more figures, and it should prove that the result obtained by rule 1 is not the correct amount, then the error consists in moving the sum two places to the right or left. If the difference consists of three figures, subtract the first or right-hand figure from 10; the result will be the sum that has been moved two places to the left if the original amount was the least; if the largest, annex two ciphers for the correct amount.

3. If the difference consists of four figures, subtract the first two or right-hand figures from 100; the result will show the sum moved two places to the left, annexing two ciphers if it has been moved to the right.

4. If the difference consists of five figures, and the result obtained by rule 1 does not prove to be the correct one, then it must consist of a sum of three figures moved two places either to the right or left, unless the third figure from the right is a 9, in which

case a compound transposition may have been made instead of a misplacement. To determine the amount that has been misplaced set down the first two figures of the difference, add the first and third together, and place the unit of the result on the left of the first two, and subtract from 1,000; the result will give the amount, consisting of three figures moved two places to the left, annexing ciphers if to the right.

5. If the difference consists of six figures, set down the first two figures, add the first two and second two together, and place the first two figures of the result thus obtained on the left of the first two figures of the difference; subtract this amount from 10,000; the result will give the amount, consisting of four figures moved two places to the right or left.

6. If the difference consists of seven figures, proceed as in the previous rule for the first four figures of the result, and prefix the left-hand figure of the difference for the fifth and total, unless the sum of the fifth and sixth figures of the difference is ten or more, in which case increase the left-hand figure by one. (The left-hand figure is prefixed to the result after the first four figures are subtracted from 10,000.)

7. If the difference consists of eight figures, proceed as in rule 5 for the first four figures of the result, and prefix the two left-hand figures of the difference for the fifth and sixth figures and total amount misplaced or moved two places to the right or left.

In all misplacements of two places the difference will be divisible by 99, and the quotient will be the sum misplaced.

In all the foregoing rules, if the original sum is the largest, annex two ciphers to the result, which will then show the exact amount moved two places to the right.

It sometimes happens that two or more misplacements may have occurred. If this should be the case, and they should all have been moved the same number of places in the same direction, the result obtained by the rules will be the sum of the amounts so misplaced.

In case that one amount has been moved to the left and another the same number of places to the right, the result will show the difference between the two, considering them as of the same denomination, *i. e.*, dollars or cents, as 24.26 written 26.24. The

difference (1.98), by the rule for misplacements of two places, would give 2 as the difference between the sums transposed or misplaced, $26 - 24 = 2$.

In cases of compound misplacements or transpositions, where one amount or figure has been moved two places to the right or left and the other one in the opposite direction (they usually occur in one amount), the difference will indicate a sum which represents the difference between the sum moved two places, taken as having been moved first one place and then two, and a sum consisting of two figures moved one place. If the difference increases the original sum, the left-hand figure of the correct sum will be less than the right, except when the difference is 81, when the left-hand figure will be one greater. The reverse will be the case if the difference diminishes the original amount.

To find the correct amount divide the difference by 9. The quotient will give the difference between the sums moved, taken separately and considered as of the same denomination, as 256, written 625; difference, 369; dividing by $9 = 41$; $60 - 20 = 40$; $6 - 5 = 1$; $40 + 1 = 41$; or, what is the same thing, $66 - 25 = 41$. Therefore, we have to look for a sum in which, if the original sum is increased, and the left-hand figure annexed to itself and diminished by the next two on its right, will make the difference indicated. If the original amount is diminished the process would be reversed; that is, if 625 was written 562, then we would have a difference of $63 \div 9 = 7 - 62 - 55 = 7$. We would then have to look for a sum in which the left-hand figure annexed to itself and subtracted from the two on its right will equal the difference indicated. By transposing the figure moved two places to the right or left, as the case may be, the correct amount will be found. If, in dividing the difference by 9, the result should give a sum whose figures are the same, as 66, it would show that the figures on the right or left, according as the original was increased or diminished, were the same, as 22, making, in effect, an outside transposition, which can be found by the rule for such cases.

The foregoing rule will apply to all cases of transposition or misplacement from right to left, or *vice versa*, by using the figure transposed as many times as it has moved places to the right or left.

In cases where the difference is 81, proceed as before, *i. c.*, 657 written 576; difference, $81 \div 9 = 9$; $66 - 57 = 9$. In such cases the correct sum will consist of an amount in which the outside figures will differ by 1, the middle figure will be one greater than 1, and two than the other, or less, according as the original amount has been increased or diminished.

In general, it may be stated that, in all cases of misplacements, the number of figures in the difference will be one greater than in the sum moved one place, and two greater than in the sum moved two places, not considering the ciphers to be annexed in cases where it has been moved to the right, thus enabling the accountant to determine at once how many figures are in the sum so moved and apply the proper rule to ascertain the exact amount.

In footing it frequently happens that owing to carelessness in setting down the various amounts, units are added as tens, or tens as hundreds instead of in their proper place. If such should be the case, the difference or error will be 9, or a multiple, as in inversions. If units have been taken as tens, the right-hand figure of the difference substracted from 10 will give the figure so footed, and the difference divided by 9 the sum in which it occurred. If tens are taken as hundreds, the first figure of the difference will be a cipher; the second subtracted from 10 will give the figure wrongly footed, and the difference divided by 9 will give the figure so footed, and all to its left, thus enabling you to locate the error without difficulty. The same process will give the figure and sum in which it is to be found, if the error be reversed, as tens added as units, etc.

The following examples will serve to illustrate the foregoing rules and make them more easily understood. The first column represents the Cash Book, Journal, or other books from which postings may have been made to the Ledger. The adjoining columns represent the Ledger, the same amounts being posted to each, and a different error made in each one in order to illustrate the various inversions that may be made. Each example will be fully explained, showing how to find the error without having to check each item, it only being necessary to look for such figures as, being transposed, will make the error, which can be found by reference to the table or by the rule given in such cases:

TRANSPOSITIONS.

CASH BK. OR JOURNAL.		LEDGER.		LEDGER.		LEDGER.		LEDGER.		LEDGER.		LEDGER.		LEDGER.	
625	15	625	15	625	15	625	15	625	15	625	15	625	15	625	15
437	82	437	82	437	82	437	82	437	82	437	82	437	82	**437**	**28**
47	25	**47**	**52**	47	25	47	25	47	25	47	25	**42**	**75**	47	25
61	00	61	00	61	00	**16**	**00**	61	00	61	00	61	00	61	00
273	76	273	76	273	76	273	76	273	76	273	76	273	76	273	76
7	64	7	64	7	64	7	64	7	64	7	64	**7**	**46**	7	64
1,624	53	1,624	53	1,624	53	1,624	53	1,624	53	**6,124**	**53**	1,624	53	1,624	53
84	52	84	52	84	52	84	52	84	52	84	52	84	52	84	52
605	20	605	20	605	20	605	20	605	20	605	20	605	20	605	20
184	00	184	00	184	00	184	00	184	00	184	00	184	00	184	00
	95		95		95		95		95		95		95		95
36	04	36	04	36	04	36	04	36	04	36	04	36	04	36	04
254	71	254	71	254	71	254	71	**524**	**17**	254	71	254	71	**257**	**41**
2,758	16	2,758	16	2,758	16	2,758	16	2,758	16	**2,758**	**61**	2,758	16	2,758	16
	85		85		85		85		85		85		85		85
3	20	3	20	**2**	**30**	3	20	3	20	3	20	3	20	3	20
879	00	879	00	879	00	879	00	879	00	879	00	879	00	879	00
45	61	45	61	45	61	45	61	45	61	45	61	45	61	45	61
7,929	39	7,929	66	7,928	49	7,884	39	8,198	85	12,429	84	7,924	71	7,931	55
		7,929	39	7,929	39	7,929	39	7,929	39	7,929	39	7,929	39	7,929	39
Error	......		27		-90	-45	00	269	46	4,500	45	-4	68	2	16

EXAMPLE 1. The difference being .27, would show that there had been a transposition in the cents column. The right-hand figure shows that there are seven possible inversions that would make the error; 7 subtracted from 10 gives 3 as the first. By referring to the table, or constructing one according to the rule, we see at a glance what they are, and have only to look for those figures. As the error has increased the original sum, it shows that the amount sought will be found in the top row of the table. On examination we find three sums that the cents reversed would make the error, viz., .85, 84.52 and 47.52. By referring to the original we find the first two have been posted correctly. The third, 47.52, we find should have been 47.25, which, being corrected, will give the correct amount.

EXAMPLE 2. The difference being .90, would indicate that an inversion had been made between the dollars and cents column, and, as the original amount was the greatest, that the sum inverted would be found in the bottom row of the table. The ciphers on the right of the difference in cases of inversion only go to show in which columns the inversion has occurred; as, if there is one, it is between the second and third; if two, between the third and fourth, and so on.

In the example we find by the table that there are nine possible inversions. On examination we find 437.82, 1,624.53, 84.52, 2.30 and 45.61, to be the only sums in which a transposition of the dollars and cents would make the difference. By referring to the original for these amounts, we find them all correctly posted until we reach 2.30, which should have been posted 3.20.

EXAMPLE 3. The difference (45.00) shows that a transposition of the units and tens of dollars has been made, and as the original sum has been decreased, the amount transposed will be found in the bottom row of the table. On examination we find 16.00 the only amount that being transposed would make the difference, and, on referring to the original, find 61.00 has been posted 16.00.

EXAMPLE 4. The difference (269.46) indicates that either a misplacement or a compound transposition has been made. Applying the rule for misplacements, we find, that as the third figure is 9, it cannot be a misplacement of two places, but might be of one, which we find, if such had been made, would be 29.94 posted as 299.40. On examination, we find we have no such an amount. Therefore it must be a compound transposition. As the first two figures of the difference make 10 when added together, it shows that it is a compound transposition, where one increases and the other diminishes the original sum. Deducting the two right-hand figures of the difference (46) from 100, gives 54 as the difference for the first or right-hand transposition; increasing the two left-hand figures (26) by 1 gives 27 as the difference for the second. On referring to the table under 54, we find 437.82 and 524.17 as the only amounts that the cents could be reversed to make that difference. In the same way, under 27, we find 524.17, as the only amount in which the tens and hundreds of dollars reversed would make the difference (the 9 in the units place of the dollars shows that the transposition has been made in the tens and hundreds), and, on examination, we find 254.71 has been posted 524.17. If the transpositions had occurred in different items, we should have had to look for each transposition separately, as in this case the 17 would be found in one item and the 520.00 in another.

EXAMPLE 5. The difference (4,500.45) shows that either a misplacement or a compound transposition has been made. We find by the rules that the only misplacement that could be made with

this difference is 500.05, posted 5,000.50, and as we have no such an amount, it must be a compound transposition, in which the original sum is increased in both cases. The first two figures on the right indicate that a transposition has been made in the cents column, whose difference is 45, and as there are two ciphers intervening, one in the hundreds and thousands of dollars, whose difference is also 45; on reference to the table we find 45.61 and 2,758.61 as the only sums whose cents being transposed would make the difference. On examination of these amounts we find that 2,758.61 should have been posted 2,758.16. In the same manner in the hundreds and thousands of dollars we find 6,124.53 and 2,758.61 as the amounts in which a transposition of the dollars would make the difference, and, on referring to the original, find 1,624.53 posted as 6,124.53. Making the proper correction in each case the accounts will balance.

EXAMPLE 6. In this example the difference (4.68) would indicate a misplacement, which, as the original sum is decreased, we find would be 5.20 written .52. On examination we find we have not that amount in the original. We must, therefore, look for some other error. There being three figures in the difference, would also indicate that there had been two transpositions. On applying the rule for such cases, we find .45 written 4.50, and .18 added together will make the difference; and, on looking for transpositions whose differences are 45 and 18, find that 47.25 has been posted 42.75, and that 7.64 has been posted 7.46.

EXAMPLE 7. In this example a misplacement of .24, written 2.40, would make the difference (2.16); but not having that amount, look further; .18 written 1.80, and .36, would also make the difference. On examination we find that there is no sum in which a transposition between the tens of the cents and units of the dollars is possible with a difference of 18; therefore, we conclude that it must be a case where one transposition increases and the other diminishes the original sum, and made partly in the same column; and, as in this case the total is increased, the one increasing must be between the units of dollars and tens of cents, and the one diminishing in the cents column. Applying the rule to ascertain the differences, we have, adding the two right-hand figures together, 1+6=7. Prefixing the left-hand one (2), gives 27 as the difference for the first trans-

position between the units of dollars and tens of cents. For the second difference we have $10.00 - 2.16 = 7.84$; adding the two left-hand figures together, rejecting the 10, we have $7 + 8 = 5$; annexing the right-hand figure (4) gives 54, the difference required; and, on examination, we find 254.71 posted 257.41; difference, 2.70; or, what is the same, 27, as the cipher only indicates that the transposition has been made between the tens and hundreds. We also find that 437.82 has been posted 437.28, with a difference of .54.

MISPLACEMENTS.

CASH BOOK OR JOURNAL	LEDGER	LEDGER	LEDGER	LEDGER	LEDGER	LEDGER	LEDGER	LEDGER	LEDGER	LEDGER	LEDGER	LEDGER
327.84	327.84	327.84	327.84	327.84	327.84	327.84	327.84	327.84	327.84	327.84	327.84	327.84
17.29	17.29	17.29	17.29	17.29	17.29	17.29	17.29	17.29	17.29	17.29	17.29	17.29
1,642.35	1,642.35	1,642.35	1,642.35	1,642.35	1,642.35	1,642.35	1,642.3	1,642.35	1,642.35	1,642.35	1,642.35	1,642.35
325.00	325.00	325.00	325.00	325.00	325.00	325.00	3.25	325.00	325.00	325.00	325.00	325.00
237.67	237.67	237.67	237.67	237.67	237.67	237.67	237.67	237.67	237.67	237.67	237.67	237.67
8.64	8.64	8.64	8.64	8.64	8.55	8.64	8.64	8.64	8.64	8.64	8.64	8.64
5.50	5.50	5.40	5.75	5.00	5.25	5.50	5.50	5.50	5.50	5.50	5.50	5.50
47.25	47.25	47.18	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.47	47.00	47.00
1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
254.71	254.71	254.71	254.71	254.71	254.71	254.71	254.71	254.71	254.71	254.71	254.71	254.71
84.52	84.52	84.84	84.75	84.84	84.84	84.84	84.84	84.84	84.84	84.7	84.84	84.84
506.75	506.75	506.00	506.00	506.00	4,561.00	506.00	506.00	506.00	506.00	506.00	506.00	506.00
45.20	45.20	45.61	45.61	45.61	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
879.61	879.61	879.43	879.43	879.00	879.00	879.00	879.00	879.00	879.00	879.00	879.00	879.00
5.43	5.43	5.98	5.16	5.00	5.00	5.00	278,516.00	25,471.00	598.00	5.00	5.00	5.00
2,785.98	2,785.98	2,785.16	2,785.16	2,785.16	2,785.16	2,785.16	163.00	2,785.16	2,785.16	2,785.16	2,785.16	2,785.16
163.16	163.16	163.42	163.42	163.42	163.42	163.42	490.00	163.42	163.42	163.42	163.42	163.42
490.42	490.42	490.00	490.00	490.00	490.00	490.00		490.00	490.00	490.00	490.00	490.00
7,829.16	7,824.21	7,845.72	7,903.41	7,507.41	12,344.55	33,045.45	283,560.00	9,276.54	7,829.96	8,189.16		
Error.....	+4.95	—16.56	—74.25	+321.75	—4,515.39	—25,216.29	—275,730.84	—1,447.38	—1.80	—360.00		
	7,829	7,829	7,829	7,829	7,829	7,829	7,829	7,829	7,829	7,829		

EXAMPLE 1. The difference (4.95) may be made in several ways. First—By the transposition of the outside figures of some number consisting of three figures, whose difference, when transposed, would be 45. On examination we find that there is no sum which, being transposed, would make the difference. Second—A misplacement of some amount moved two places to the right, as the original sum is the largest. Applying the rule for such cases, we have 1.00 — .95 = .05. Annexing two ciphers gives 5.00 as the sum which, if posted .05, would make the difference. As we do not find that amount, it must be some amount moved one place to the right; 4.95 ÷ 9 = .55, which on examination we find should have been posted 5.50.

EXAMPLE 2. On applying the rule for a misplacement of two places, we find it could not be made with the given difference (16.56). On dividing it by 9, we have 1.84, and, as the original sum is the least, shows that 1.84 has been posted as 18.40, which, on examination, proves to be correct.

EXAMPLE 3. On applying the rule for a misplacement of one place, by dividing the difference by 9, we have 8.25, which, as the original sum is the least, would show that 8.25 had been posted as 82.50. But, as we do not find that amount, it must be a misplacement of two places to the left. By the rule we have, subtracting the first two figures of the difference from 1.00 — .25 = .75, which we find to have been posted 75.00.

EXAMPLE 4. In this example we find that a misplacement of one place of 35.75, posted as 357.50, would make the difference of 321.75. But, as we do not find such an amount, it must be one of two places. To determine the amount so misplaced by the rule, we have, setting down the first two figures of the difference (75), and adding the first and third together, 1 + 5 = 6, and placing it on the left of the first two = 6.75, which being subtracted from 10.00 gives 3.25, which we find should have been posted 325.00.

EXAMPLE 5. In this example the difference (4,515.39) would indicate that a misplacement of either one or two places had been made. On applying the rule for one place we have 501.71 as the amount which, if moved one place to the left, would make the difference. As we do not find that amount, it must be one of two places. Applying the rule to determine the amount of such misplacement,

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and setting down the first two figures of the difference (39), and adding the first two figures and the second two together we have $39 + 15 = 54$, which, placed on the left of the first two and subtracted from $100.00 - 54.39 = 45.61$, which we find, on examination, has been posted 4,561.00.

EXAMPLE 6.   On applying the rule for a misplacement of one place in this example, we have 2,801.81 as the amount which would, if so misplaced, make the difference (25,216.29).   Not having such an amount we know it must be one of two places, which we proceed to determine by the rule.   Setting down the first two figures of the difference (29) and adding the first two figures and the second two together, $29 + 16 = 45$, which, being placed on the left of the first two, gives 45.29, which, being subtracted from $100.00 = 54.71$; and as the sum of the fifth and sixth are less than ten, we place the left-hand figure of the difference on the left of this amount for the total of the sum misplaced $= 254.71$, which we find has been posted 25,471.00.

EXAMPLE 7.   In this example we find that 30,636.76, if moved one place to the left, would make the difference (275,730.84); but not having that amount must look for one of two places.   Proceeding as in the previous example, setting down the first two figures (84) and adding the first two and second two, $84 + 30 = 114$, and placing the first two figures of this result on their left gives 14.84, which, being subtracted from $100.00 = 85.16$; prefixing the two left-hand figures of the difference to this sum gives 2,785.16, which we find has been posted 278,516.00.

EXAMPLE 8.   In this example we find, on applying the rule for a misplacement of one place, we have 160.82 as the sum which would make the difference (1,447.38) if carried one place to the left, and as we do not find either that amount or any whose sum would be equal to it, we proceed to look for one of two places, which we find would be 14.62, posted as 1,462.00.   Not finding that amount, we then look for two or more amounts whose sum would be 1,462.00. On examination we find 864.00 and 598.00 as the only ones whose sum equals that amount, and that they should have been posted 8.64 and 5.98, respectively.

EXAMPLE 9.   The difference in this example (1.80) would indicate that it was either a transposition between the dollars and cents

columns, a misplacement, or an error in footing by adding the tens of cents in the units of dollars. On looking for a transposition we find, as the original is the least, that there is no amount which could be transposed to make it. We also find that .20 posted as 2.00 would make the difference. But not finding such an amount, and there being no sum which could be moved two places to the left that would make it, we then look for an error in footing, which we find by the rule would be 2 in the tens of cents column footed as 2 in the units of dollars. On examination we find that such is not the case. We therefore, as a last resort, must look for a misplacement in which one amount has been moved to the right and one to the left. As there is no amount which, being moved two places, would make the difference, it must be of one place. Applying the rule for a misplacement of one place, we have $180 \div 9 = 20$, which shows that some amounts whose difference is 20 when considered as of the same denomination, have been moved, one to the right and one to the left. On examination we find that .55 and 7.50 are the only ones whose difference is 20, $i.\ e.$, $75 - 55 = 20$, and on reference to the original entries find that they should have been posted 5.50 and .75.

EXAMPLE 10. The difference in this example (360.00) would indicate that either a misplacement, transposition or an error in footing had occurred. If a misplacement, 40.00 posted as 400.00 would make it. Not having that amount, we look for a transposition between the tens and hundreds of dollars, and, on examination, fail to find any amount which could be so transposed. We must, therefore, look for some figure that has been footed in the hundreds of dollars instead of the tens. Deducting the first figure of the difference (not counting the cipher on the right) from 10 gives $10 - 6 = 4$ as the figure so footed, and on examination we find that, owing to carelessness in posting, 47.25 has been footed as 407.25.

In this connection, and in order to more fully illustrate the almost marvelous powers of the NINES, the following rules for finding the amount of the error, when the sum has been moved one place to the right or left, in addition to the one previously given, are appended:

1. If the difference consists of three figures, set down the first or right-hand figure, add the first and second together, and place the unit of the result on the left of the first.   Subtract the sum thus obtained from 100 and the result will show the amount that has been moved one place to the left if the difference shows that the original or correct sum is the least.   If the difference shows that it is greater, place a cipher on the right of the result.   It will then show the amount that has been moved one place to the right.

2. If the difference consists of four figures, proceed as before for the first two figures of the subtrahend.   For the third add the first three figures together, carrying one.   If the sum of the first two was 10 or more, set down the unit of the sum thus obtained on their left and subtract from 1,000 for the desired amount, annexing a cipher if the difference is less than the correct sum.

3. If the difference consists of five figures, proceed as before for the first three figures of the subtrahend.   For the fourth, add the first four figures together, carrying 1 if the sum of the first three is 10 or more, 2 if 20 or more, and place the unit of the result on the left and subtract from 10,000.   Proceed in like manner for any number of figures in the difference, remembering to set down only the unit of each addition, and to carry 1 to the next for each 10 in the previous results.

As before noted, the difference, where the sum has been moved one place, will always contain one more figure than the original sum moved to the left, and the same number if moved to the right.

Example 1.

2567	2567	Set down first figure of difference.............................	8
5²	520		
5276	5276	Add first two together, 8+6=14, placing unit on	
728	728	the left, equals................................	48
827	827		
———	———		
9450	9918		
	9450	Subtracting from...	100
	———		
Difference,	468	The sum misplaced..	52

Example 2.

4728	4728	Set down first figure of difference........................	6
8247	8247		
384	3840	Add first two, 5+6=11, placing unit on left, equals	16
1927	1927		
256	256	Add first three, 4+5+6+1, carrying 1, equals......	16
15542	18998		
	15542	Placing unit on left, equals................................	616
Difference,	3456	Subtracting from..	1000
		The sum misplaced..	384

Example 3.

15038	15038	Set down first figure of difference........................	4
7406	74060		
34971	34971	Add first two, 5+4, unit on left, equals................	94
894	894		
6708	6708	Adding first three, 6+5+4, unit on left, equals......	594
65017	131671		
	65017	Adding first four, 6+6+5+4+1, carrying 1, placing unit on the left..	2594
Difference,	66654	Subtracting from..	10000
		The sum misplaced..	7406

DROPPED FIGURES.

It frequently happens that in transferring figures from one sheet or book to another a figure is dropped or omitted from some one of the amounts, or that, owing to carelessness in setting down the sum, in footing, some figure is omitted or footed in the wrong place, as units with tens, or *vice versa*. The error thus occasioned has heretofore been very difficult to determine, except by the tedious process of checking all the various items going to make up the sum or account, as the difference, except when a 9 or 0 has dropped, does not indicate an inversion or misplacement, which it to a certain extent is; that is, it moves all the figures to the left of the one dropped one place to the right. The difference or error will always be less than the original or correct amount. The following rule, original, and never before published, will enable anyone to determine, not only the *exact figure* that has been dropped, but its exact position in the sum from which it has been dropped; *i.e.*, units, tens, hundreds

or thousands, *also. all the figures* (if any) *to its left.*   Thus giving, if the dropped figure should be the unit, the *exact amount* to be looked for, and in any case the dropped figure and all to its left.

The position of the dropped figure is determined by the number of ciphers on the right of the difference.   If there are none, the unit has been dropped; if one, it is in the tens, if two, in the hundreds, and so on.

To determine the *exact figure* and those on its left, divide the difference (omitting the ciphers, if any on the right) by 9, and to the result annex the remainder, which will give the *exact sum*, including the dropped figure to the left of the ciphers, the remainder being the figure dropped.   If there are no ciphers in the difference, the result will be the sum in full.   In all cases where a 9 or a 0 has been dropped, the difference, when divided, will have no remainder.   If 9 has been dropped, the figure to the left of the remainder, which will be a 0, will be one greater than the correct one; by deducting 1 from that figure and annexing 9, the correct result will be obtained. If a 0 has been dropped, the result will be correct by annexing a 0 to the quotient.

The following examples are given to illustrate the rule:

Example 1.

$$37,856$$
$$\underline{3,785}$$
$$9)34,071$$
$$\overline{3,785\text{--}6}\ \text{remainder, the figure dropped.}$$

There being no ciphers on the right of the difference indicates that the unit has been dropped; annexing it, we have 37,856, the correct amount.

Example 2.

$$37,856$$
$$\underline{3,786}$$
$$9)3,407(0$$
$$\overline{378\text{--}5}$$

There being one cipher on the right of the difference shows that a figure in the tens has been dropped.   Annexing the remainder (5) to the quotient, we have 3,785, the figure dropped, and all to its left.   In the same manner, if there should be two ciphers on the right of the difference, the result will give the dropped figure and all to its left.

The following examples will illustrate the dropping of a 9 or 0:

Example 1.

$$42,569$$
$$4,256$$

$$9)38,313$$

$$4,257$$

Deducting 1 = 4,256, annexing 9 = 42,569, the correct amount.

Example 2.

$$382,507$$
$$38,257$$

$$9)34,425(0$$

$$3,825$$

Annexing a cipher gives 38,250 as the figure dropped and all to its left.

In cases where, in footing, a figure has been omitted in the footing, but is set down correctly in the sum, the difference will consist of one figure in the place from which it was omitted, *i. e.*, units or tens, and will be the figure so omitted; the ciphers on the right indicating its position in the sum; but, as often occurs in setting down an amount in a long column of figures, a sum may be so placed that one figure is omitted and the others footed in the wrong position, as hundreds with tens, the sum from which it is omitted and misfooted can be determined by the rule for dropped figures, if the figures to the left of the one dropped are footed in the columns to the right of their proper position. If, however, the figures to the left of the one dropped should be so placed that they are footed in the columns to the left of their proper position, then, to determine the correct sum and the figure dropped, divide the difference by 9; the result will be a sum terminating in 9 (except when the dropped figure is a 0, in which case it becomes a misplacement and the terminal 0), and a remainder, unless the figure dropped is 9; if that should be the case there will be no remainder. By dropping the terminal 9, and increasing the figure to its left by 1, the correct figures to the left of the one dropped will be found, and subtracting the remainder found by the division from 9, will give the figure dropped.

Example 1.

```
278 5
 56 4
 23 46   Dropping the 4.
 82 5
```
6,520   Correct footing.
6,480   Footing made in error.

       40=4 the figure dropped.

Example 2.

```
278 5
 56 4
 2346
 82 5
```
6,520   Correct footing.
4,410   Footing made in error.

9)211(0

      23-4=234, the sum including the dropped figure, and all to its left in which the error is made.

Example 3.

```
27 85
 5 64
23 4 6
 8 25
```
27,180   Footing made in error.
6,520   Correct footing.

9)2,066(0)(229–5.

Dropping the 9, and increasing the figure to its left by 1=23; for the figures to the left of the one dropped, 9—5=4, the dropped figure; 234, the sum from which it was dropped.

Example 4.

```
48 75
 3 9 7
29 45
 6 21
```
11,448   Footing made in error.
8,838   Correct footing.

9)261(0)(29–0.

Dropping the 9 and increasing the figure to its left by 1=3; for the figure to the left of the one dropped, 9—0=9, the dropped figure; 39, the sum from which it was dropped and the misplacement to the left made.

In case two figures have been dropped or omitted from any sum, and they adjoin each other, the first, or right-hand figure dropped will be the one to the left of the ciphers on the right (if any) in the difference. To ascertain what are the dropped figures and those to their left, divide the difference (omitting the ciphers) by 99; the quotient will be the figures to the left of the ones dropped, and the remainder will be the dropped figures, which, being annexed to the quotient, will give the full sum, except as to the figures on the right of those dropped.

Example.

374,5$6$3
3,743   Dropping the 5 and 6 gives a dif-
ference, which, divided by   99)37,082(0)(=374-56=37,456, the full sum, except the right-hand figure; if the two right-hand be dropped, the result will be the sum in full.

In cases where two figures have been dropped, but not adjoining each other, the full sum can be found, except as to the figures to the right of the first or right-hand figure dropped. It is not claimed that this method, where two figures, not adjoining, have been dropped, will be of much practical value, as there is no means of determining the position in the sum of the left-hand figure dropped, but that being known, the rest can readily be found. The rules for obtaining this result are appended, more as a mathematical curiosity and source of amusement than from any hope of its being of any practical value in the detection of errors. The only rule for determining what figure had been dropped from any sum, heretofore published, only enabled you to say what the dropped figure was, but did not determine its position in the sum, or give any of the other figures composing the sum from which it was dropped, and therefore was of no practical value in the detection of errors arising from that source, and only applied to one figure. No attempt, so far as known, has ever been made to determine what the figures were, when more than one had been dropped, heretofore; still less to determine the exact sum from which it has been dropped, to the left of and including the right-hand figure dropped.

RULE.

The first or right-hand figure will be indicated as before; there-fore, it will be necessary that you should be informed as to the posi-tion in the sum of the left-hand figure dropped, in addition to the difference.

1. If there be an interval of one figure between the figures dropped, divide the difference (rejecting the ciphers on its right) by 99, until you have found the left-hand figure dropped, which will be the right-hand figure of the quotient. The remainder, if of two figures when added together, will be the sum of the figures dropped. Deducting the one found will give the other, or right-hand figure. Place this on the right of the sum obtained by the division, leaving an interval for the remaining figure. From this figure (adding 10, if necessary) subtract the right-hand figure of the difference. Place the result in the interval and you will have the complete sum except as to any figures to the right of the second or right-hand figure dropped.

Example.

384,765   Dropping 4 and 6
3,875

Difference divided by   99)380,89(0)(384-73. 7 + 3 = 10 — 4 = 6, the sec-ond or right-hand figure dropped. Placing it on the right of the quotient, leaving an interval of one place = 384 6; deducting the right-hand figure of the difference from this figure, increased by 10 = 16 — 9 = 7, for the remaining figure, which, being placed in the interval, gives 38,476 + the desired sum except the right-hand figure.

2. If there should be an interval of two figures, proceed in the same manner until the first figure has been found, which you will know by having been previously informed either of its position in the sum or of the number of places intervening.   If the sum of the remainder exceeds 18, deduct 9; the result will be the sum of the dropped figures.   Deducting the first as before will give the other. Placing it on the right of the quotient, leaving an interval of two places, from the second or right-hand figure dropped, adding 10, if necessary.   Subtract the first figure of the difference for the right-hand figure of the interval, from this figure, carrying as in ordinary subtraction.   Deduct the second figure of the difference for the remaining figure.

Example.

347,865
3,785

34,408(0)(34 — 748 = 19 — 9= 10 — 4 = 6, the second figure dropped; placing it on the right of the quotient, leaving an interval of two places=34 6; subtracting the first figure of the difference, as before, we have 16—8=8 as the right-hand figure of the interval; subtracting from this figure the second figure of the difference (0), carrying 1, 8—1=7 for the second figure of the interval; placing them in their proper place, gives the sum from which the figures were dropped, 34,786.

3.   If there should be an interval of three figures, proceed as before until the first figure is found.   If the remainder, which will consist of four figures, contains a cipher and their sum exceeds 9, deduct 9 for the sum of the dropped figures.   If the first three or right-hand figures of the remainder equal 9, the left-hand figure will be the sum of the dropped figures.   If the sum of the remainder be less than 18 and the sum of the first three is less than 9, it will be the sum of the dropped figures.   If the sum is 18 or more, deduct 9; if 27, deduct 18, proceeding as before to fill the first two places. Place the left-hand figure of the difference in the third place.

Example.

835,674
8,567

99)827,107(83 — 5,407 = 16 — 9 = 7 — 3 = 4, the second figure dropped; filling the interval gives the full sum, 835,674.

If the interval between the dropped figures is four places, the remainder will contain five figures.   If their sum exceeds 18 and there is a cipher in the remainder, deduct 9 for the sum of the dropped figures.   If there should be two ciphers, the sum of the remainder will be the sum of the dropped figures unless it exceeds 18, in which case deduct 9.   If the sum of the first four figures of the remainder is 9, the left-hand figure will be the sum of the dropped figures.   If the remainder contains no ciphers and its sum exceeds 18, deduct 18; if 27 or more, deduct 27, filling the intervals for three places by subtracting the difference, as in Example 1. Place the left-hand figure of difference in fourth place, unless the one to its right be a 9; if so, increase it by 1.

Examples.

$$385,647$$
$$8,564$$

99)377,083(3 — 80,083 = 19 — 9 = 10 — 3 = 7, the
second figure.

$$384,765$$
$$8,476$$

99)376,289(3 — 79,289 = 35 — 27 = 8 — 3 = 5, the
second figure dropped.   On the same principle the sum can be found for any
number of intervals.

STOCK COMPANIES.

The tendency nowadays seems to be toward the formation of stock
companies for the conduct of all kinds of large business operations,
as it affords better facilities for conducting and settling the same, as
it avoids all the complications and settlements which attend or fol-
low the withdrawal or death of a partner.   As the duties of the ac-
tive members or officers are usually fully defined, either in the arti-
cles of incorporation or by-laws, there is, or need be, no conflict or
clash in conducting the business, as each officer has his own spe-
cific duty to perform and is accountable for the same; the general
policy and management being usually vested in a board of direc-
tors and its president.

In case one of the stockholders desires to withdraw or dies, it does
not involve a settlement or winding up of the whole business to as-
certain or settle his interest, as his stock represents that, and may
pass from one person to another without affecting in any manner
the business of the company, which only dies by limitation, insolv-
ency, or by a majority vote of the stockholders to wind up its affairs.

The laws governing the formation, conduct of and liabilities of
stock companies vary in the different states, and should be con-
sulted before forming such companies, in order to comply with their
requirements.

When it has been determined to organize a stock company for
any purpose, the first step necessary is to draw up articles of incor-
poration, defining the purpose and objects for which such company
is formed and such other matters as may be required by the laws of
the state in which it is formed ; also, specifying such other things

as the incorporators may deem necessary, such as the capital stock, the number and value of the shares, the terms and manner of paying for the same, duration of the company, officers for conducting the business and defining their duties, and providing for the adoption of by-laws for the government of the company and its officials, etc., which should be filed for record and authority to do business with the officer provided by law — usually the secretary of state.

Stock companies may be organized in several ways. First — With the full amount of the capital stock paid in full before commencing business. Second — With the stock to be paid for in installments at certain specified times. Third — The stock to be paid for by assessments made from time to time, as may be required to conduct the business. Fourth — With a specified amount or percentage of the nominal capital paid in, for which certificates of stock at their par value are issued.

<center>STOCK BOOKS.</center>

In forming or organizing stock companies, either for a general or specific purpose, in which it is intended to dispose of the stock to all who may wish to invest in the enterprise, the first book necessary is a Stock Subscription Book, which should contain a heading setting forth the name and purpose of the company, the amount of the capital stock, the number of shares and their par value, the conditions and terms of the subscriptions, and an agreement that the subscribers will take the number of shares set opposite their names and comply with all the conditions of the sale of the stock.

The other books required, in addition to the ordinary books used in the transaction of the business, are a Stock Ledger, Journal and Cash Book. On the Journal an entry should be made debiting each person with the number of shares for which he has subscribed and value of the same at the par value, and giving Capital Stock credit for the total. If the stock is paid in full, an entry should be made on the Stock Cash Book, giving Stock credit for the same, and one debiting the company in its corporate name for the same.

In case of companies where assessments are levied, each person should be charged with number of shares and par value of their subscriptions, and Capital Stock credited as before. When an assessment is levied, each person should be debited with the amount

of such assessment, and Stock account credited; and, when paid, each person should be credited with the amount on the Stock Cash Book, and the company debited with the same.

In cases where the capital stock is sold or issued at a specified amount or percentage, each subscriber should be debited as before, and Capital Stock credited. They should also be debited with the actual value or amount to be paid for such stock, and the same credited to Stock account, payments to be treated as in the other cases. When a stockholder desires to transfer his stock, or any portion thereof, he should be credited on the Stock Journal with the number of shares so transferred and the amount of the same at its par value, and the purchaser debited with the same.

In case the capital stock is increased, it should be treated in the same manner as the original issue.

The Capital Stock account will always show the amount of the subscribed capital, and the individual accounts the number of shares and amount held by each person.

The illustrations will show the mode of procedure in each case.

The General Ledger contains all matter appertaining to the general business of the company, the assets and liabilities, and all transactions, as in any ordinary business, and is kept independent of the Stock Ledger.

The General Ledger should be opened by crediting Stock account with the amount of the paid capital on the General Cash Book. If the stock should be paid for in merchandise, real estate or other property, the amounts so paid should be debited to their accounts instead of cash.

ILLUSTRATION I.—CAPITAL STOCK FULLY PAID UP.

STOCK SUBSCRIPTION BOOK.

The St. Paul Investment Company, having been organized for the trans-action of a General Business, with a paid up capital of $150,000, in Shares of $100 each, we, the undersigned, hereby agree to take and pay for the number of Shares, in Cash, set opposite our names.

Date.		Names.	No. of Shares.	Amount.	
1890 Jan ...	2	A. K. Marshall................................	150	15,000	00
		B. K. Marshall	250	25,000	00
		H. P. Upham.......................................	250	25,000	00
		Gustav Willius	250	25,000	00
		J. J. Hill..	300	30,000	00
		Thos. F. Oakes	300	30,000	00
			15,000	150,000	00

The Journal entry would be:

1890 Jan ...							150,000	00
	2		Sundries Dr. to Capital Stock......	....	......			
			A. K. Marshall, for 150 Shares......	15,000	00			
			B. K. Marshall, for 250 Shares.....	25,000	00			
			H. P. Upham, for 250 Shares......	25,000	00			
			Gustav Willius, for 250 Shares....	25,000	00			
			J. J. Hill, for 300 Shares..............	30,000	00			
			Thos. F. Oakes, for 300 Shares...	30,000	00			

On the Stock Cash Book an entry should be made as follows:

CASH.

Dr.						Cr.
1890 Jan.	2	To Stock, for amount received for subscriptions to the Capital Stock from the following: A. K. Marshall.....................25,000.00 B K. Marshall.....................15,000.00 H. P. Upham.......................25,000.00 Gustav Willius ....25,000.00 J. J. Hill...........................30,000.00 Thos. F. Oakes 30,000 00	150,000	00		
			150,000	00		
1890 Jan.	2	By St. Paul Investment Co., for amount of paid up subscriptions to the Capital Stock.			150,000	00
					150,000	00

ILLUSTRATION 2.—CAPITAL STOCK TO BE PAID IN ASSESS-MENTS, AS REQUIRED.

STOCK SUBSCRIPTION BOOK.

The Good Luck Mining and Milling Company having been organized for the purpose of buying, selling, operating and developing mines, and erecting and operating mills for the reduction of minerals, the purchase and sale of ores, the purchase and sale of real estate, and the transaction of such other business as may be necessary, with a subscribed capital of $1,000,000, in shares of $100 each, to be paid for in installments, as required, after the first, which shall be 25 per cent, payable within 30 days from the date of the subscription, we, the undersigned, hereby agree to take and pay for the number of shares set opposite our names, on the terms and conditions above set forth:

DATE.		NAMES.	NO. OF SHARES.	AMOUNT.	
1890 Jan.	2	David Moffat.....	2,000	200,000	00
		H. A. W. Tabor.................................	2,000	200,000	00
		C. N. Wood....................................	1,500	150,000	00
		Dennis Ryan...................................	2,000	200,000	00
		A. H. Jones....................................	1,500	150,000	00
		C. J. Berlin....................................	1,000	100,000	00
			10,000	1,000,000	00

The entries in the Stock Journal would be as follows:

ST. PAUL, Jan. 2, 1890.

Sundries Dr. to Capital Stock..				1,000,000	00
David Moffat, for 2,000 Shares........................	200,000	00			
H. A. W. Tabor, for 2,000 Shares...............................	200,000	00			
C. N. Wood, for 1,500 Shares....................	150,000	00			
Dennis Ryan, for 2,000 Shares.............................	200,000	00			
A. H. Jones, for 1,500 Shares..............................	150,000	00			
C. J. Berlin, 1,000 Shares..	100,000	00			
Sundries Dr. to Stock......................................				250,000	00
David Moffat, for Assessment No 1, 25% on 2,000 Shares...	50,000	00			
H. A. W. Tabor, for Assessment No. 1, 25% on 2,000 Shares.	50,000	00			
C. N. Wood, for Assessment No. 1, 25% on 1,500 Shares.....	37,500	00			
Dennis Ryan, for Assessment No. 1, 25% on 2,000 Shares...	50,000	00			
A. H. Jones, for Assessment No. 1, 25% on 1,500 Shares.....	37,500	00			
C. J. Berlin, for Assessment No. 1, 25% on 1,000 Shares......	25,000	00			

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The entries on the Stock Cash Book, when the assessments are paid in, would be:

			CASH.					CASH.		
Dr.									Cr.	
1890 Jan.	2	To D. Moffat, for Assessment No. 1	50,000	00	1890 Jan.	2	By Goodluck M. & M. Co. for amount received on Assessment No. 1.........	250,000	00	
		To H. A. W. Tabor, for Assessment No. 1..........	50,000	00						
		To C. N. Wood, for Assessment No. 1.............	37,500	00						
		To D. Ryan, for Ass. No. 1	50,000	00						
		To A. H. Jones, for Assessment No. 1.......	37,500	00						
		To C.J. Berlin, for Assessment No. 1..................	25,000	00						
			250,000	00				250,000	00	

ILLUSTRATION 3.—CAPITAL STOCK SOLD FOR A PERCENTAGE OF ITS PURCHASE.

STOCK SUBSCRIPTION BOOK.

The Maverick Land and Cattle Company, with a Capital Stock of the par value of $1,000,000, in Shares of $100 each, to be disposed of to the subscribers at fifty per cent of their par value in cash, has been organized for the purpose of buying, selling and raising Cattle; buying and selling Land, and transacting such other business as may be necessary. We, the undersigned, hereby agree to take and pay for the number of Shares set opposite our names, on the terms and conditions above set forth.

DATE.		NAMES.	NO. OF SHARES.	AMOUNT.	
1890 Jan.	2	A. V. Head..................	2,500	250,000	00
		S. T. Hauser	2,500	250,000	00
		T. A. Marshall....................................	1,000	100,000	00
		H. A. True.......................................	2,000	200,000	00
		P. H. Kelly.......................................	2,000	200,000	00
			10,000	1,000,000	00

The Journal entries would be:

<div align="center">St. Paul, Jan. 2, 1890.</div>

Sundries Dr. to Capital Stock			1,000,000	00
A. V. Head, for subscription for 2,500 Shares......	250,000	00		
S. T. Hauser, for subscription for 2,500 Shares...	250,000	00		
T. A. Marshall, for subscription for 1,000 Shares..	100,000	00		
H. A. True, for subscription for 2,000 Shares	200,000	00		
P. H. Kelly, for subscription for 2,000 Shares......	200,000	00		
Sundries Dr. to Stock.......................................			500,000	00
A. V. Head, for 2,500 Shares of Capital Stock.....	125,000	00		
S. T. Hauser, for 2,500 Shares of Capital Stock...	125,000	00		
T. A. Marshall, for 1,000 Shares of Capital Stock	50,000	00		
H. A. True, for 2,000 Shares of Capital Stock	100,000	00		
P. H. Kelly, for 2,000 Shares of Capital Stock......	100,000	00		

The entry on the Stock Cash Book would be:

Dr.	CASH.				CASH.		Cr.
1890 Jan. 2	To A. V. Head, for subscription to Stock.........	125,000	00	Jan. 2	By The Maverick Land and Cattle Company for amounts received for subscriptions to the Capital Stock.....................	500,000	00
	To S. T. Hauser, for subscription to Stock.........	125,000	00				
	To T. A. Marshall, for subscription to Stock...	50,000	00				
	To H. A. True, for subscription to Stock.........	100,000	00				
	To P. H. Kelly, for subscription to Stock.........	100,000	00				
		500,000	00			500,000	00

<div align="center">TRANSFERRING STOCK.</div>

When a stockholder sells or disposes of his stock, or any portion thereof, it is necessary that a record of such transfer should be made on the books of the company. If the whole amount held by the party making the transfer is to be transferred, it may be done by an indorsement on the original certificate, or by issuing a new one. In case only a portion was transferred, it would be necessary to issue a new certificate to each one for the number of shares held by each.

B. K. Marshall wishes to transfer 100 shares of stock in the St. Paul Investment Company to H. P. Upham. The entry on the Stock Journal would be:

H. P. Upham,   10,000.00

                   Dr. To B. K. Marshall,   10,000.00

For 100 shares of stock transferred.

A certificate should be issued to H. P. Upham for the 100 shares, and a new one to B. K. Marshall for 150, the balance held by him; the old certificate being taken up and canceled.

DIVIDENDS.

When a dividend is declared by the board of directors from the accrued profits or other sources, a dividend account should be opened on the General Ledger, and credited with the amount of such dividend, debiting Profit and Loss, or other source of said dividend. When payments are made, dividend account should be debited for the same.

TIME TABLES.

Table showing the Number of Days from any Day of one Month to the same Day of any other Month within the Year.

FROM ANY DAY OF	To THE SAME DAY OF											
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
January	365	31	59	90	120	151	181	212	243	273	304	334
February	334	365	28	59	89	120	150	181	212	242	273	303
March	306	337	365	31	61	92	122	153	184	214	245	275
April	275	306	334	365	30	61	91	122	153	183	214	244
May	245	276	304	335	365	31	61	92	122	153	184	214
June	214	245	273	304	334	365	30	61	92	122	153	183
July	184	215	243	274	304	335	365	31	62	92	123	153
August	153	184	212	243	273	304	334	365	31	61	92	122
September	122	153	181	212	242	273	303	334	365	30	61	91
October	92	123	151	182	212	243	273	304	335	365	31	61
November	61	92	120	151	181	212	242	273	304	334	365	30
December	31	62	90	121	151	182	212	243	274	304	335	365

EXAMPLE. How many days from May 15, 1888, to March 23, 1889? Find May in the vertical column on the left, and March over the top. At the intersection of these two lines we find 304, which is the number of days from May 15, 1888, to March 15, 1889; to March 23 will be 8 more days = 312, the number of days required. One more day than is given in the above table must be allowed for intervals embracing the end of February falling in a leap year.

Table Showing the Numerical Order of the Days of the Year.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
January	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
February.....	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59			
March..........	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
April...........	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	
May.............	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151
June............	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	
July.............	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212
August.......	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243
September...	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	
October.......	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304
November...	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	
December ...	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365

The foregoing table will be found useful in ascertaining the date on which a note or account falls due, when the time is expressed in days.

EXAMPLE. On what date will a note at 90 days, given March 24th, be due ? By referring to the table, under March 24th we find 83; adding the time of the note, $83 + 90 = 173$; referring to the table, we find that the 173d day is June 22d; therefore, the note will be due June 22d, or 25th, allowing three days grace.

When the time runs from one year into another the date can be found by subtracting the number of days remaining in the first year from the given time, and under the date of the remainder will be found the required date.

EXAMPLE. On what date will a note given Nov. 15, 1889, at 90 days, fall due ? We find from the table that there are 46 days still remaining in that year; $90 - 46 = 44$; under 44 we find February 13th; therefore, the note will be due Feb. 13, or 16, 1890.

In leap years, where the end of the month of February intervenes, one day should be deducted from the date shown by the table.

A CENTENNIAL CALENDAR

For ascertaining any Day of the Week for any given Time within the Present Century.

Days of the Month (reference columns 1–7)

1	2	3	4	5	6	7
1 M	1 T	1 W	1 T	1 F	1 S	1 S
2 T	2 W	2 T	2 F	2 S	2 S	2 M
3 W	3 T	3 F	3 S	3 S	3 M	3 T
4 T	4 F	4 S	4 S	4 M	4 T	4 W
5 F	5 S	5 S	5 M	5 T	5 W	5 T
6 S	6 S	6 M	6 T	6 W	6 T	6 F
7 S	7 M	7 T	7 W	7 T	7 F	7 S
8 M	8 T	8 W	8 T	8 F	8 S	8 S
9 T	9 W	9 T	9 F	9 S	9 S	9 M
10 W	10 T	10 F	10 S	10 S	10 M	10 T
11 T	11 F	11 S	11 S	11 M	11 T	11 W
12 F	12 S	12 S	12 M	12 T	12 W	12 T
13 S	13 S	13 M	13 T	13 W	13 T	13 F
14 S	14 M	14 T	14 W	14 T	14 F	14 S
15 M	15 T	15 W	15 T	15 F	15 S	15 S
16 T	16 W	16 T	16 F	16 S	16 S	16 M
17 W	17 T	17 F	17 S	17 S	17 M	17 T
18 T	18 F	18 S	18 S	18 M	18 T	18 W
19 F	19 S	19 S	19 M	19 T	19 W	19 T
20 S	20 S	20 M	20 T	20 W	20 T	20 F
21 S	21 M	21 T	21 W	21 T	21 F	21 S
22 M	22 T	22 W	22 T	22 F	22 S	22 S
23 T	23 W	23 T	23 F	23 S	23 S	23 M
24 W	24 T	24 F	24 S	24 S	24 M	24 T
25 T	25 F	25 S	25 S	25 M	25 T	25 W
26 F	26 S	26 S	26 M	26 T	26 W	26 T
27 S	27 S	27 M	27 T	27 W	27 T	27 F
28 S	28 M	28 T	28 W	28 T	28 F	28 S
29 M	29 T	29 W	29 T	29 F	29 S	29 S
30 T	30 W	30 T	30 F	30 S	30 S	30 M
31 W	31 T	31 F	31 S	31 S	31 M	31 T

YEARS 1801 TO 1900

Years	31 Jan	28 Feb	31 Mar	30 April	31 May	30 June	31 July	31 Aug	30 Sept	31 Oct	30 Nov	31 Dec
1801 1807 1818 1829 1835 1846 1857 1863 1874 1885 1891 1897	4	7	7	3	5	1	3	6	2	4	7	2
1802 1813 1819 1830 1841 1847 1858 1869 1875 1886 1887 1898	5	1	1	4	6	2	4	7	5	6	2	3
1803 1814 1825 1831 1842 1853 1859 1870 1881 1887 1898	6	2	2	5	7	3	5	1	6	2	6	4
1805 1811 1822 1833 1839 1850 1861 1867 1878 1889 1895	2	5	5	1	3	6	1	4	7	2	5	7
1806 1817 1823 1834 1845 1851 1862 1873 1879 1890	3	6	6	2	4	7	2	5	1	3	6	1
1809 1815 1826 1837 1843 1854 1865 1871 1882 1893 1899	1	4	4	7	2	5	7	3	6	1	4	6
1810 1821 1827 1838 1849 1855 1866 1877 1883 1894 1900	2	5	5	1	3	6	1	4	7	2	5	7

LEAP YEARS.

Years	31 Jan	29 Feb	31 Mar	30 April	31 May	30 June	31 July	31 Aug	30 Sept	31 Oct	30 Nov	31 Dec
1804 1832 1860 1888	7	3	4	7	2	5	7	3	6	1	4	6
1808 1836 1864 1892	5	1	2	5	7	3	5	1	4	6	2	4
1812 1840 1868 1896	3	6	7	3	5	1	3	6	2	4	7	2
1816 1844 1872	1	4	5	1	3	6	1	4	7	2	5	7
1820 1848 1876	6	2	3	6	1	4	6	2	5	7	3	5
1824 1852 1880	4	7	1	4	6	2	4	7	3	5	1	3
1828 1856 1884	2	5	6	2	4	7	2	5	1	3	6	1

NOTE.—To ascertain any day of the week in any year of the present century, first look in the table of years for the year required, and under the months are figures which refer to the corresponding figures at the head of the columns of days below. For example.—To know what day of the week September 2d will be on in the year 1873, in the table of years look for 1873, and in a parallel line under September is figure 1, which directs to column 1, in which it will be seen that September 2d falls on Tuesday.

This table will give the day of the week on which a person was born.

To ascertain on what day of the week any given date falls in any year: To the year (omitting the century) add one-fourth part (rejecting fractions, if any), the day of the month desired, and the ratio of the month, as shown in the table; divide the product by 7. If the remainder is 1, the day is Sunday; 2, Monday; 3, Tuesday; 4, Wednesday; 5, Thursday; 6, Friday; 0, Saturday.

<center>RATIO OF MONTHS.</center>

September and December...:..   1
April and July...   2
January and October..   3
May...   4
August   5
February, March and November...   6
June..   0

In leap years add one less for the ratio of January and February in that year.

<center>*Example.*</center>

On what day will July 4 fall in 1891?
      91   The year, omitting the century.
      22   One-fourth of 91, rejecting the fraction.
       4   The day of the month desired.
       2   The ratio of July.

7)119(17–0 remainder = Saturday.

On what day of the week did August 7th, 1872, fall?
      72   The year, omitting the century.
      18   One-fourth of 72.
       7   The day of the month desired.
       5   The ratio of August.

7)102(14–4 remainder.   It therefore fell on Wednesday.

<center>EQUATION OF PAYMENTS.</center>

Many accountants who are called upon but seldom to average an account find themselves at a loss how to proceed, having forgotten the method, and the rules for doing so not being easily accessible.   The following rules, which are believed to be the shortest and most simple in use, have been compiled.   By their use

any account can be easily and readily equated. Equation of payments is the process of finding when two or more sums, due at different times, may be paid at once without loss to debtor or creditor. The time for such payments is called the equated time.

RULE.

To equate two or more debits, due at different times, multiply each debit by its term of credit and divide the sum of the products by the sum of the debits. The quotient will be the equated or average time.

Example.

John Smith owes Henry Jones $1,200 ; $250 due in two months, $300 in three months, $350 in four months and $300 in six months, from March 25th. If Smith pays the whole sum at one time, how long a credit should he have?

$$250 \times 2 = 500$$
$$300 \times 3 = 900$$
$$350 \times 4 = 1400$$
$$300 \times 6 = 1800$$

1200)4600($3\frac{5}{6}$ months = 3 months 25 days from March 25th, which we find by the table to be July 20th, as the date on which the whole sum should be paid.

PARTIAL PAYMENTS.

It often happens that partial payments are made on a debt before it falls due. In such case the debtor is entitled to an extension of time on the balance. To find the time of such extension to be allowed:

RULE.

Multiply each payment by the time it was made before falling due, and divide the sum of these products by the balance of the debt. The result will be the extension to be allowed, beyond the original time, on the balance.

Example.

Joseph Brown sells B. K. Marshall, Aug. 7, 1889, a bill of goods amounting to $1,750, on six months' time. At the expiration of one month he pays $100 on account, at the end of two months $250, at the end of three months $325, at four months $400 and at five months $250. At what time after the expiration of the six months would the balance be due? $1750.00 at six months from Aug. 7, 1889, due Feb. 7, 1890:

$$
\begin{aligned}
100 \times 5 &= 500 \\
250 \times 4 &= 1000 \\
325 \times 3 &= 975 \\
400 \times 2 &= 800 \\
250 \times 1 &= 250
\end{aligned}
$$

Balance   425 $)3525(8\tfrac{5}{17}$ months $= 8$ months 9 days from February 7, which we find by the table to be Oct. 16, 1890, as the date on which the balance would be due.

Where the account consists of bills bought on different dates and terms of credit, and it is desired to find at what time the whole account would fall due.

RULE.

To equate an account when the terms of credit begin at different times and on different terms: Find the dates when the several amounts become due; from the earliest of these dates as a standard, reckon the number of days to each of the others; then find the equated time by dividing the sum of the products by the sum of the account, as before, and reckon it forward from the standard date.

Example.

We find upon our Ledger the following account, which the party desires to settle at once. At what date would it be due?

March 1, $350 at 3 mo., due June 1,	$350 \times$ 0 =	000000
April 15, 500 at 4 mo., due Aug. 15,	$500 \times$ 75 =	37500
May 10, 200 at 2 mo., due July 10,	$200 \times$ 39 =	7800
June 20, 600 at 6 mo., due Dec. 20,	$600 \times$ 202 =	121200
1650	1650	$)166500$

$100\tfrac{150}{165} = 101$ days

from June 1st, which on reference to the table we find to be September 10th, is the date on which a note should be made payable. June 1st being the earliest date on which any of the amounts fall due, we take it as the standard date from which to reckon the time.

AVERAGING ACCOUNTS.

It is often desirable to settle or close an account by taking a note for the balance, or the debtor may wish to pay it in full, in which case it becomes necessary to average the account in order to find what the cash balance is, or at what date the note should be made payable. Unless the accountant is in constant practice he is very liable to forget the method of doing so, especially if the account embraces items on both sides on which different terms of credit are allowed. Works have been published giving tables in which the results can be found, but as few have them at hand, and even then it is as easy and quick to work them out as to hunt through the tables for the various sums, to say nothing of the liability to error in setting down the wrong amounts, it is believed that the following rule will enable one to accomplish the desired result in less time and with less trouble.

RULE.

To average an account which embraces items on both sides having different dates and terms of credit, and to find the cash balance or the date on which the balance is due : Take the earliest date on either side on which an item falls due as a standard, and multiply each item by the number of days intervening between the item when it falls due and the standard date ; divide the difference between the sum of the debit and that of the credit products by the balance of the accounts. The quotient will be the averaged time. Reckon this forward from the standard date if the excess of products is on the same side with the balance of the account; if not, backward.

To find the cash balance, average the account, and if the given date of settlement falls before the averaged time, find the present worth of the balance of the account for the interval between the date of settlement and when due; if after, add interest for the interval.

To find the present worth, divide the given sum by the amount of $1.00 for the given time at the given rate.

Example.

The following account with James Williams appears on my Ledger, which he desires to settle at this date, July 30th. What is the cash balance, or if a note is given for the balance, when should it be made payable, interest being reckoned at 7 per cent?

James Williams.

1890						1890					
Jan.	5	To Mdse. @ 3 mos...	1	375	00	Jan.	10	By Mdse. @ 3 mos...	1	150	00
	25	" Mdse. @ 4 mos...	2	500	00		25	" Cash...............	25	100	00
Feb.	3	" Mdse. @ 2 mos...	3	250	00	Feb.	5	" Mdse. @ 4 mos...	3	300	00
Mch.	15	" Mdse. @ 6 mos...	5	680	00		15	" Mdse. @ 4 mos...	4	250	00
Apl.	30	" Mdse. @ 3 mos...	7	400	00	Apl.	30	" Cash...............	113	400	00

Arranging the different sums on each side under the date on which they respectively fall due, and multiplying each item by the number of days between the earliest date, as the standard, and the date on which they severally fall due; dividing the balance of the products by the balance of the account, we have:

April 5th...........	$375 \times 70 = 26,250$	April 10th...........	$150 \times 75 = 11,250$
May 25th..........	$500 \times 120 = 60,000$	January 25th......	$100 \times 0 = 0$
April 3d............	$250 \times 68 = 17,000$	June 5th.............	$300 \times 131 = 39,300$
Sept. 15th........	$680 \times 233 = 158,440$	June 15th..........	$250 \times 141 = 35,250$
July 30th...........	$400 \times 186 = 74,400$	April 30th...........	$400 \times 95 = 38,000$
	2,205 336,090		1,200 123,800
	1,200 123,800		

Bal. of acct..... 1,005   )212,290(= 211 days from January 25th, which we find by the table to be August 24th, the date on which the balance of the account would fall due, and the date on which, if a note is given, it should be made payable. If settled by cash on the day of settlement, we find the present worth of the balance of the account, due in 25 days, to be $1,000.20, the amount to be paid July 30th.

It is the practice in many places to deduct simple interest on the balance of the account for the unexpired time, instead of finding the present worth. By that method the cash balance July 30th would be $1,000.17.

Another method of arriving at practically the same result—that is, to find the cash balance—is to find the interest on each item from the date it falls due to the time of settlement. Write it on the same side of the account as its item, if the item falls due before the date of settlement; if not, on the opposite side. Find the balance of interest, and add it to the balance of the account, if the two balances are on the same side; if not, subtract it. Taking the foregoing account as an example, we have:

<div align="center">Dr.   Cr.</div>

Date.		Amount.		Days.	Interest.		Date.		Amount.		Days.	Interest.	
April	5	375	00	116	8	37	April	10	150	00	111	3	20
May	25	500	00	66	6	35	January	25	100	00	186	3	58
April	3	250	00	118	5	67	June	5	300	00	55	3	17
September	15	680	00								47	6	15
July	30	400	00				June	15	250	00	45	2	16
							April	30	400	00	91	7	00
Totals	......	2,205	00		20	39			1,200	00		25	26
Balance of Interest	......				4	87	Balance of account	......	1,005	00			
		2,205	00		25	26			2,205	00		25	26
Cash Balance	......	1,000	13		Due July 30.								

As the balance of the account and interest are on opposite sides, we deduct the balance of interest from the balance of the account, which leaves $1,000.13 as the cash balance due July 30th. The difference in the results arises from the fractions of days in one method, and of cents in the other. If the fraction amounts to one-half, or over, of a day, we call it one day; if less, throw it away, and the same with the cents in interest.

<div align="center">FOREIGN EXCHANGE.</div>

Foreign Bills of Exchange are those that are drawn in one country and payable in another. They are usually drawn in sets of two or more bills of the same tenor and date, one of which being paid, the others are null and void. This is done to prevent delay in the payment if one should be lost, they being forwarded by different mails. The bills are usually known as Banker's or Sterling Bills, and Commercial, and are drawn at sight or on time. Banker's sight command the highest price, Commercial time the lowest.

The rate of exchange varies from day to day, and is quoted daily in the papers of the commercial centres. The quotations are given on England in the number of cents that will buy £1 of exchange. Thus, if exchange on London is quoted at 4.86 for sterling, $4.86 will buy £1 of exchange. On France at so many centimes to the dollar. A centime is $\frac{1}{100}$ of a franc. If exchange is quoted at 5.12, $1.00 will buy 5 francs 12 centimes of exchange. Exchange on other countries is quoted at so many cents to some coin taken as a standard.

ARBITRATION OF EXCHANGE.

It often happens, owing to the demand, or other causes, that exchange on any particular country can be purchased cheaper by buying through one or more intermediate countries. As, for instance, owing money in London, you buy a draft on Paris, exchange that for one on Hamburg, and that for one on London. The question to be determined is whether it would be better to buy in that way or direct. It can be ascertained by the following:

RULE.

Write the equivalents by pairs, each with its denomination, on opposite sides of a vertical line, commencing on the left with the denomination of the required sum to be remitted, and arranging the terms so that each denomination on the right may correspond with the one next below it on the left. If the terms are properly arranged the last denomination on the right will correspond with the first on the left. Cancel common factors on the left and right, and divide the product of the remaining terms on the right by that of the remaining terms on the left.

The following examples will serve to illustrate the rule:

Example 1.

A merchant owing £1,800 in London, finds that exchange on London is 4.88; on Paris, 5.15. Exchange on London in Paris is 25 francs 15 centimes to the pound sterling. Is it better for him to remit direct, or by circuitous exchange through Paris, and how much?

$	£1800.	Canceling	1800 360
£1	25.15 Francs.		25.15
Francs 5.15	$1.	1.03 5.15	

We have 360 × 25.15 ÷ 1.03 = $8,790.29 as the cost by circuitous exchange. By direct, 1,800 × 4.88 = $8,784.00. Gain by direct exchange, $6.29.

Example 2.

A New York merchant having a balance of £1,000 due him in London, orders it remitted by the following course: To Hamburg, the rate of exchange being 20¾ marks to the pound; thence to Copenhagen, at 2¼ marks to the

rix-dollar; thence to Bordeaux, at 2 francs 80 centimes to the rix-dollar; thence to New York, at 5 francs 30 centimes to the dollar. How many dollars did he receive? Would he have gained or lost by drawing directly on London and selling his draft at 4.87; taking no account of interest?

$	£1000	Canceling	1000 200
£1	20.75 Marks.		20.75 83
Marks 2.25	1 Rix-dollar.	9 2.25	
Rix-dollars 1	2.80 Francs.		2.80
Francs 5.30	$1	1.06 5.30	

We have 200 × 2.80 × 83 ÷ 1.06 × 9 = $4.872.12 as the amount he would receive; if he had drawn direct, 1000 × 4.87 = $4,870.00. Gain by circuitous exchange, $2.12.

RULES FOR CALCULATING INTEREST.

The following rules for calculating interest are based on thirty days to the month, which has become the general usage throughout the United States. For the purposes of accountants and others having to make frequent calculations, they are considered the shortest, simplest and best methods in use, and, in connection with the time tables given elsewhere, will enable one to calculate interest rapidly, readily and correctly, on any amount for any length of time.

To find the interest on any sum, at any rate per cent, for any given time: Reduce the years to months, adding in the number of months in the given time; to this sum annex one-third the number of days; multiply the principal by the sum thus obtained, pointing off as many places in the product as you have figures in the multiplier and cents in the principal. The product will be the interest at 12 per cent.

To find the interest at any other rate per cent:

If at 6 per cent, take $\frac{1}{2}$ of this product.

If at 7 per cent, take $\frac{7}{12}$ of this product.

If at 8 per cent, take $\frac{2}{3}$ of this product.

If at 9 per cent, take $\frac{3}{4}$ of this product.

If at 10 per cent, take $\frac{5}{6}$ of this product.

If at 11 per cent, take $\frac{11}{12}$ of this product.

If at 15 per cent, add $\frac{1}{4}$ to this product.

If at 18 per cent, add $\frac{1}{2}$ to this product.

If at 20 per cent, add $\frac{2}{3}$ to this product.

SHORT RULE FOR INTEREST.

To find the interest on any sum for any number of days at any rate of interest, multiply the principal by the number of days, and divide —

If at 3 per cent, by 120.
If at 4 per cent, by 90.
If at 5 per cent, by 72.
If at 6 per cent, by 60.
If at 7 per cent, by 52.
If at 8 per cent, by 45.
If at 9 per cent, by 40.
If at 10 per cent, by 36.
If at 12 per cent, by 30.
If at 15 per cent, by 24.
If at 18 per cent, by 20.
If at 20 per cent, by 18.

The above is based on thirty days to the month, except 7 per cent, which is 364 days to the year.

RAPID ADDITION.

A very useful, and one might say necessary, qualification for accountants, railroad and entry clerks, and all others having a large amount of footing to do, is the ability to foot rapidly and correctly. The following suggestions are offered in the belief that, if faithfully followed and persisted in, they will very materially aid in accomplishing that result :

The process of addition may be likened to learning to read, as one is the result of the various combinations of the letters of the alphabet, and is learned by practice and memory, by which one becomes so expert that they can tell at a glance what any combination of letters means, or word they represent, without having to spell it out letter by letter.   In the same manner anyone can acquire the faculty of telling at a glance the sum of as many figures as the eye can take in at once.   The figures being only about one-third as many in number as the letters of the alphabet, it is proportionately easier to learn the various combinations; with

this further advantage in favor of the figures, that while the same letters, if differently arranged or combined, will produce widely different results, the same figures in addition will always produce the same result, no matter in what order they are placed; so that having once learned a combination you know its sum in whatever order it may be arranged.

It should be borne in mind that merely committing to memory a series of combinations will not make one an expert in rapid addition, but that it is a very essential part of the system that there should be constant practice. A portion of each day, no matter how small, should be devoted to practice. By so doing the student will be surprised at the rapid improvement he is capable of, both in speed and correctness.

In commencing practice with this object in view, a very good plan is first to arrange a series of combinations, consisting of say five figures, and commit them to memory, so that you will be able to give their sum at sight as easily and readily as you would a word of five letters. For instance:

1	2	3	4	5	1	1	1	1	1	3	3	1	2
2	3	4	5	6	2	3	4	2	2	4	4	3	8
3	4	5	6	7	2	3	4	3	4	5	5	5	7
4	5	6	7	8	2	3·	4	3	4	5	4	8	9
5	6	7	8	9	2	3	4	3	4	6	7	7	6
15	20	25	30	35	9	13	17	12	15	23	23	24	32

Other combinations can be easily formed, which should be gradually extended until you can take in and tell at a glance the sum of any column of at least ten figures.

In the same manner it may be extended so as to take in two or more columns at a time, very materially increasing the speed.

SHORT METHODS OF EXTENSION.

The following rule, original with the author, and never before published, will prove of great service to accountants, entry clerks and others in making extensions of invoices, figuring percentages, etc., where the multiplier consists of two or more of the same figures, as 33, 444, etc. By a little practice anyone can become very expert in its use, and make the extension in a single line as rapidly as he can multiply by a single figure.

8

<center>RULE.</center>

Multiply the first or right-hand figure of the sum to be multiplied by the first figure of the multiplier; set down the unit of the result for the first figure of the product; add the first and second figures of the multiplicand together; multiply their sum by the first figure of the multiplier, as before, carrying the tens, if any, as in ordinary multiplication; set down the unit of the result for the second figure of the product; if there should be only two figures in the multiplier after you have added the first two together, drop the right-hand one and take up the one on the left; add and multiply them, as before.   Continue so to do until there is but one left; multiply that, setting down the result.   You will then have the total in one line.

If there should be more than two figures in the multiplier, commencing on the right with the first and then adding the first two together, then the first three, and so on, until you have added as many figures of the multiplicand together as you have figures in the multiplier, then dropping one from the right and taking up from the left as long as there is any to take up; continue to drop from the right until there is none remaining, multiplying each addition and setting down the unit of the result and carrying the tens until the final one in which the total is set down.

The following examples will show the application of the rule:

<center>*Example 1.*</center>

$$
\begin{array}{ll}
7863 & 3 \times 3 = \qquad\qquad\qquad\quad 9 \\
\underline{33} & 3 + 6 = \ 9 \times 3 = \qquad\qquad 27 \\
259479 & 6 + 8 = 14 \times 3 = 42 + 2 = 44 \\
& 8 + 7 = 15 \times 3 = 45 + 4 = 49 \\
& \qquad\quad 7 \times 3 = 21 + 4 = 25 = 259479.
\end{array}
$$

<center>*Proof.*</center>

$$
\begin{array}{r}
7863 \\
\underline{33} \\
23589 \\
23589 \\
\hline
259479
\end{array}
$$

Example 2.

$$
\begin{array}{ll}
2594 & 4 \times 4 = \qquad\qquad\qquad 16 \\
\underline{444} & 4 + 9 = 13 \times 4 = 52 + 1 = \quad 53 \\
1151736 & 4 + 9 + 5 = 18 \times 4 = 72 + 5 = 77 \\
& 9 + 5 + 2 = 16 \times 4 = 64 + 7 = 71 \\
& 5 + 2 \quad = 7 \times 4 = 28 + 7 = 35 \\
& 2 \times 4 = \quad 8 + 3 = 11 = 1151736
\end{array}
$$

Proof.

$$
\begin{array}{r}
2594 \\
\underline{444} \\
10376 \\
10376 \\
\underline{10376} \\
1151736
\end{array}
$$

To square any number of figures ending in 5: Multiply the left-hand figure or figures by the left-hand figures of the number to be squared, increased by 1, and annex 25 to the result.

Examples.

$$75 \times 75 = 7 \times 8 = 56 \text{ annex } 25 = 5625$$
$$425 \times 425 = 42 \times 43 = 1806 \text{ annex } 25 = 180625$$

To multiply any number of figures ending in 5: Taking the smaller number as the multiplier, increase the left-hand figure or figures of the multiplicand by 1, and multiply by the left-hand figure or figures of the multiplier, adding 50 for each difference of 1 between the left-hand figures of the multiplier and multiplicand, and to that result add 25.

Examples.

$$35 \times 25 = 4 \times 2 = 800 + 50 + 25 = 875$$
$$425 \times 215 = 43 \times 21 = 90300 + 1050 + 25 = 91375$$

In this method two ciphers are always annexed to the first result. By practice one may become very proficient in its use, especially where only two figures are involved in each sum, and find it very

useful in making extensions on invoices, etc. To multiply by any of the following numbers, annex two ciphers to the sum to be multiplied, and

If by 50, divide by 2.
If by 33⅓, divide by 3.
If by 25, divide by 4.
If by 20, divide by 5.
If by 16⅔, divide by 6.
If by 12½, divide by 8.

A very convenient and rapid method of making extensions in a single line, in figuring percentages in railroad or other work, where it is desired to divide an amount into several parts, or amongst the different divisions of a railroad, or in making extensions on invoices, etc., especially where the percentage or price is expressed by two figures, is to use the sum to be divided or extended, if it contains more figures than the per cent or price as the multiplier. This method only requires practice to make one very expert and rapid in its use, saving a great deal of time and labor, and, as experience shows, one who practices and uses this method is less liable to error than by the old methods.

The essential part of this method is to multiply by a single figure and keep in mind the amount to be carried. It can also be extended so as to include three or more figures, the only difference being in the larger amounts to be carried from one multiplication to another, which anyone will soon be able to do after practice on two figures. The following is the rule:

RULE.

Multiply the percentage or price by the first figure of the amount to be apportioned or extended, setting down the first figure of the result; then multiply the per cent by the second figure, adding to the result the amount to be carried from the first result, setting down the unit of this result on the left of the one previously obtained. Proceed in like manner, multiplying the per cent or price by each figure of the amount to be extended, and carrying from the former result, placing the unit on the left, until the last figure is reached, when the whole of that result should be placed on the left, giving the total in one line.

The following examples, with the explanations, will serve to make the rule more readily understood:

Example 1.

It is desired to divide or apportion the following amounts amongst the different divisions of a railroad, according to the percentage to which they are entitled:

Amt.	Per Ct.	Amt.	Per Ct.	Amt.	Per Ct.	Amt.	Per Ct.	Amt.
46 75	15	7.01	35	16.36	33	15.43	17	7.95

15×46.75; multiplying by first figure, $15 \times 5 = 75$; set down 5; carry 7; $15 \times 7 = 105 + 7 = 112$; set down unit on left of first figure $= 25$; carry 11; $15 \times 6 = 90 + 11 = 101$; set down unit as before $= 125$; carry 10; $15 \times 4 = 60 + 10 = 70$; setting down total on left $= 7.0125$ for first percentage. $35 \times 5 = 175$; set down 5; carry 17; $35 \times 7 = 245 + 17 = 262$; set down 2; carry 26; $35 \times 6 = 210 + 26 = 236$; set down 6; carry 23; $35 \times 4 = 140 + 23 = 163$; set down total $= 16.3625$, second percentage. $33 \times 5 = 165$; set down 5; carry 16; $33 \times 7 = 231 + 16 = 247$; set down 7; carry 24; $33 \times 6 = 198 + 24 = 222$; set down 2; carry 22; $33 \times 4 = 132 + 22 = 154$; set down total, 15.4275, third percentage. $17 \times 5 = 85$; set down 5; carry 8; $17 \times 7 = 119 + 8 = 127$; set down 7; carry 12; $17 \times 6 = 102 + 12 = 114$; set down 4; carry 11; $17 \times 4 = 68 + 11 = 79$; set down total $= 7.9475$, fourth percentage.

Percentages.	Amounts.
15	7.01
35	16.36
33	15.43
17	7.95
Totals............... 100	46.75

Example 2.

Amt.	Per Ct.	Amt.	Per Ct.	Amt.	Per Ct.	Amt.	Per Ct.	Amt.
384.36.	23	88.40	16	61.50	34	130.68	27	103.78

Multiplying by first figure of amount, $23 \times 6 = 138$; set down 8; carry 13; $23 \times 3 = 69 + 13 = 82$; set down 2; carry 8; $23 \times 4 = 92 + 8 = 100$; set down 0; carry 10; $23 \times 8 = 184 + 10 = 194$; set down 4; carry 19; $23 \times 3 = 69 + 19 = 88$; set down total $= 88.4028$, first percentage. $16 \times 6 = 96$; set down 6; carry 9; $16 \times 3 = 48 + 9 = 57$; set down 7; carry 5; $16 \times 4 = 64 + 5 = 69$; set down 9; carry 6; $16 \times 8 = 128 + 6 = 134$; set down 4; carry 13; $16 \times 3 = 48 + 13 = 61$; set down total $= 61.4976$, second percentage. $34 \times 6 = 204$; set down 4; carry 20; $34 \times 3 = 102 + 20 = 122$; set down 2; carry 12; $34 \times 4 = 136 + 12 = 148$; set down 8; carry 14; $34 \times 8 = 272 + 14 = 286$; set down 6; carry 28; $34 \times 3 = 102 + 28 = 130$; set down total $= 130.6824$, third percentage. $27 \times 6 = 162$; set down 2; carry 16; $27 \times 3 = 81 + 16 = 97$; set down 7; carry 9; $27 \times 4 = 108 + 9 = 117$; set down 7; carry 11; $27 \times 8 = 216 + 11 = 227$; set down 7; carry 22; $27 \times 3 = 81 + 22 = 103$; set down total $= 103.7772$, fourth percentage.

Percentages.	Amounts.
23	88.40
16	61.50
34	130.68
27	103.78
Totals............... 100	384.36

A very good plan in practicing the above method, until one has become expert enough to do it readily, is to set the amounts to be carried down on a slip of paper, but rely on it as little as possible.

BUSINESS LAW.

It is a fraud to conceal a fraud.

Ignorance of the law excuses no one.

The acts of one partner bind all the rest.

A note or contract made with a minor is voidable.

A note or contract made with a lunatic is void.

An agreement without consideration cannot be enforced.

Principals are responsible for the acts of their agents.

Checks or drafts must be presented for payment within a reasonable time.

Signatures made with a lead pencil are good in law.

A note made on Sunday is void, and contracts made on Sunday cannot be enforced.

A note obtained by fraud, or from a person in a state of intoxication, cannot be collected.

It is not legally necessary to say on a note "for value received."

Notes bear interest only when so stated.

A note lost or stolen does not release the maker; he must pay it, •if the consideration for which it was given and the amount can be proven.

An indorser has the right of action against all whose names were on the bill when he received it.

An indorser may prevent his own liability to be sued by writing "without recourse," or similar words.

If the letter containing a protest of non-payment be put into the post office, any miscarriage does not affect the party giving notice.

Part payment of a debt which has passed time of statutory limitation revives the whole debt.

Each individual in a partnership is responsible for the whole amount of the debts of the firm, except in cases of special partnership.

The law compels no one to do impossibilities.

A receipt for money paid is not legally conclusive.

An oral agreement must be proved by evidence.

A written agreement proves itself.

The law prefers written to oral evidence, because of its precision.